A STUDY OF LEADERSHIP IN EDUCATIONAL INSTITUTIONS UNDER THE DUAL SYSTEM OF PRIVATE VOCATIONAL EDUCATION ADMINISTRATION: ITS EFFECTS ON PERSONNEL'S BEHAVIORS

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**A Dissertation Submitted in Partial
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ABSTRACT

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The research aimed to build understanding about the relationship between leadership applied to executives of private vocational educational institutes in the dual system and behaviors of personnel through some key variables, such as needs satisfaction, relationship quality, and loyalty. The first objective of the study was to explore types of leadership which affected loyalty. The second objective was to explore behaviors which were influential to loyalty. The third objective was to explore the dimension of needs satisfaction which affected the relationship quality. The fourth objective was to explore the relationship between leadership in educational institutes and needs satisfaction. The last objective was to explore the demographic characteristics and structure of educational institutes which affected job satisfaction through the structural equation modeling.

Then, the models were divided into 3 types as follows: The transformational leadership model; the instructional leadership model; and the combination of both leadership models. The multiple group analysis was conducted. The data were collected from personnel in private vocational educational institutes in the dual system, totaling 396 persons from all over Thailand, to explore which type of leadership to be adopted by executives so as to be appropriate with current administration. The findings of the study revealed that all of 3 leadership models could be properly applied because the construct validity of variables was suitable, the fitness of the models passed the criteria and configural invariance test. Afterwards, the structural equation modeling analysis was conducted by confirmatory factor analysis, path analysis, and multiple regression analysis. It was found that each leadership model in educational institutes showed the positive relationship with personnel behaviors directly and indirectly, except that the

variables of demography and structure of educational institutes were not influential to job satisfaction.

The findings of this study revealed that the theoretical framework of the study on leadership in educational institutes and the context of private vocational educational institutes in the dual system were consistent, and could be applied to behaviors of personnel in this educational system.

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CHAPTER 1

INTRODUCTION

1.1 Background and importance of the problem

This research focuses on a survey of private sector vocational colleges that have started to implement dual system which is modelled on the vocational education system in Germany. Because of the development of a more competitive labour market and industrial sector, the Department of Vocational Education, under the Ministry of Education has indicated that it sees value in the implementation of the said system which will enable students to enter the professional market more promptly. The provision will boost the economic development of the country. The dual system was first introduced to Thailand in 2012 after the ratification of a memorandum of understanding (MOU) between the Thai Ministry of Education and the German Chamber of Commerce. This was first put into practice by a private-sector vocational college institution in 2013. Implementation of the dual system has not yet been completed because of the excessive flexibility of internal management in the private sector. Internal practices can always be adapted according to specific contexts. However, the practices must be monitored by regulators and according to the development plans of the government. Moreover, education institutions must ensure that their academic programmes meet the requirements of students so that they are able to successfully enter the competitive labour market as one of the primary goals of private sector vocational colleges is to create value as qualified educational institutions.

The objective of this thesis is to solve the problems faced by academic employees; especially executives and heads educational institutions. This thesis also examines the possibility of leadership and how leadership can bring about desirable behavior in the workplace and other educational contexts. It will also examine wow organisation leadership influences leaders' loyalty towards the organisation. Findings

will help promote the quality and success of students as expected in the national reformulation plan for educational development by the Department of Vocational Colleges, in accordance with the Vocational Education Act of 2008. It is hoped that the findings of this thesis will also benefit, both informally and formally, the dual system and to therefore produce qualified graduates who can help develop the country. Moreover, this thesis aims to survey the conditions set by private educational institutions that apply to the dual system and help develop good relationships between executives.

Vocational institutions, in each region, approved by the Ministry of Education comprise a number of colleges under the supervision of the Office of the Vocational Education Commissions (OVEC). Section 13 in the Vocational Education Act of 2008 indicates that "vocational institutions shall be included within the institution under the authority of the Vocational Education Commission for the utmost benefit that results from cooperation and shared resources in accordance with the regulations of the Ministry". According to a survey conducted in 2018, Thailand has 484 vocational colleges, categorised by the OVEC based on their region. The Northeast has the highest number, with 174 vocational colleges. The Central region has 169 (all 61 of them are in Bangkok). Meanwhile, the East of Thailand has 44, the North 33, and the South 64, respectively.

The concept of leadership includes the characteristics of a person who sets a foundation toward long-term effectiveness and change (Kotter, 1990; Robertson, 1991). He or she is not attached to any rules or regulations but flexible enough to put the right man or woman on the right job (Yukl, 1999). Therefore, a leader is an important factor for the competency of any organisation. To be a competent leader in the competitive international market requires problem solving and mediator skills and the ability to convey and combine messages from the business world with the organisational culture. Competition has expanded due to the more developed and advanced technology. Highly-developed technology requires people to constantly improve and update their knowledge; this notion is widely accepted. Due to advances in technology, everyone can get access to information and can improve their personal capabilities with minimal investment. The improvement and development of access to information in regards to human capital has impacted upon how people can adapt

themselves in relation to new innovations. It also has impacted the outcome of task completion at an organisation level (Yukl, 2008). Employees are also crucial in creating the dynamic of organisational practices. Theories about leadership have been widely researched in academia. To have a good leader in an organisation is considered a strategy to put that organisation in an advantageous position. Accordingly, this research focuses on two important aspects of the concept of leadership:

Transformation Leadership (TFL): In the initial phase of the development of the concept of leadership focused on the personal identity and characteristics of a successful leader. It was not easy to look for a consistent set of characteristics that make an effective leader. The following phase (1950-1960) is considered the medial period for the development of the concept of leadership. According to the thinking of the medial period, to be effective, leaders must be able to adapt themselves according to changes they encounter. In the beginning of 1970, a theory of the transformation of leadership (TFL) was formulated (Asencio, 2016; Rojas-Méndez, Vasquez-Parraga, Kara, & Cerda-Urrutia, 2009). The original theory was pioneered by Burns (1978) and then was developed by Bass (1985). This included two models of leaders; 1) transformational and; 2) transactional leadership. The variables were measured with a multifactor leadership questionnaire (MLQ) (Bass & Avolio, 1990, 1995) which categorized according to a variety of dimensions (Yukl, 1999).

The theory asserts that forms of transformation leadership have impacts on the employees. With their devotion, the leaders can inspire others in the organisation. Therefore, the transformational leader had a strong relationship with the organisational performance in terms of finance (García-Morales, Lloréns-Montes, & Verdú-Jover, 2008), capabilities in resource management in the workplace (Zhu & Akhtar, 2014), exchanges of knowledge (Srivastava, Bartol, & Locke, 2006) and the reduction of the employee's resignation rate (Ariyabuddhiphongs & Kahn, 2017).

Instructional leadership is one of the characteristics that helps one monitor, control and evaluate others' performance and is directly concerned with academic concepts (Hallinger, 2003). According to Fullan (2014), the practices of leadership influence academic curricula in schools, hence, the concept is quite contextual. Brandon, Hollweck, Donlevy, and Whalen (2018) said that the sharing of academic knowledge about leadership in an academic institution must be supported by

monitoring and appraisal with a number of follow-up steps. The research of Tan (2012) compared leadership models for knowledge creation and building capabilities as a result of academic workshops. Instructional leadership was very popular in the 1980s and was part of a leadership distribution model in schools which empowered different groups in educational institutions (Neuman & Simmons, 2000). Leadership distribution is more efficient (Hargreaves & Fink, 2009) in promoting classroom curricula (Coleman & Cardno, 2006). The overall landscape of instructional leadership examines and ensures that academic direction does not deviate from what is indicated and meets students' expectations. Knowledge building in the group is a core focus of the concept. Leadership means that the group members are aware of the same set of practices. How the leader takes care of the group members and passes on instructions to them must be consistent.

Relational quality is the moderating variable that can have direct and indirect influences on relationships in the workplace, and originates from two types of leadership. This type of variable supports organisational development. Research in this area has been applied using several variables (Wulf, Odekerken, & Iacobucci, 2001); 1) job satisfaction, which is evaluated by using the case of how the relationship in the workplace affects an employee (J. C. Anderson & Narus, 1984); 2) trust, which is the feeling that business partners rely on one another in the exchange of resources; 3) honesty or credibility; 4) benevolence (Sirdeshmukh, Singh, & Sabol, 2002), and, 5) commitment, which refers to appropriate relations in the organisation (Moorman, Zaltman, & Deshpande, 1992) and depends on establishing the 'right' emotions that one has with their business partners. The relationship includes the emotional and spiritual connection developed when the group cooperates (Morgan & Hunt, 1994).

Transformational leadership impacts trust among employees (Shih, Chiang, & Chen, 2012). Trust at the individual level is considered a strong factor that must occur (at least) with a member in the organisation. Without personal trust the establishment of trust is impossible. This is because the organisation would lacks a role model to set norms and provide guidelines to other members (Barney & Clark, 2007) denoting 'good' performance (Asencio, 2016). Different leaders give rise to different procedures of how trust is built that will eventually contribute to the organisation's goals.

The relationship between transformational leadership and job satisfaction is considered a behavioral variable in the organisation, as it is an expression of individuals' variety of emotions in the workplace. Job satisfaction depends on context and leads to positive emotions when the positive results of appraisal are revealed or when an employee has a positive experience (Locke, 1983; Muterera, Hemsworth, Baregheh, & Garcia-Rivera, 2018). Job satisfaction is part of human resource management that contributes various procedures; such as the necessity to build up incentives to survey the demands of the employees (Akedere, 2006), where the main concern is how to grant rewards to employees under different circumstances (Spitzbart, 2013).

The relationship between transformational leadership and organisational commitment is relevant when examining the connection between values and member achievements, as well as the connection between the values and benefits of the organisation (Buchanan, 1974). The leader has to unify different factions of employees to achieve one single goal as set by the organisation. transformational leadership influences individuals, but this can be expanded to the group level. The expansion occurs as a result of unified support for the organisation (Ennis, Gong, & Okpozo, 2018). Leaders' behaviour is the factor which makes commitment possible. Transformational leadership thus also depends on the level of commitment (Nguni, Sleegers, & Denessen, 2006).

Instructional leadership influences trust and occurs as the result of the desire to strengthen skills and knowledge of both the instructors and students, and is almost certainly involved with the leader's ability to bring success to the educational system (Ng, Nguyen, Wong, & Choy, 2015). The leader of the educational institution, accordingly impacts trust as he or she is expected to run the administration so the educational institution can improve its environment and the community of the employees. A nice environment upgrades the quality of the interactions and relationships among the employees and stakeholders (Gregory, 2017). Therefore, the leader's ability to create this environment impacts the behavior and trust of and between employees. According to S. H. Lee and Fenich (2018), trust can develop into other behavior such as loyalty and commitment.

Hulpia, Devos, and Van Keer (2009) explain that two variables influence the level of devotion towards an organisation and that loyalty is distributed through forms of functional leadership, particularly loyalty towards the organisation and group cooperation that can lead to the development of a common process of decision making, according to the definition of the European Union (EU). Kaparou and Bush (2015) define leaders' pedagogical qualities as a set of knowledge, skills and their commitment to the organisation. The quality of leaders in academic institutions could be a factor in attaining successful academic results and thus should be a factor in the process of instructor recruitment and leader selection. That is, one needs to ensure that the new employees are capable and suitable to perform the position they are appointed to. The level of commitment to the organisation (among employees) at a school indicates the result of the attempts and the procedures to strengthen the quality of individuals. Organisational commitment is a natural indicator of individual's qualities that can strengthen their performance in the workplace (Pietsch & Tulowitzki, 2017). The role of instructional leadership is therefore related to the factors of organisational commitment where good results are expected from the employees (Enueme & Egwunyenga, 2008; Sheppard, 1996). Moreover, instructional leadership impacts job satisfaction; when the level of job satisfaction is low, employees may want to quit their jobs. An instructional leader is required to compile academic resources at a school and arrange them appropriately which can lead to employee recruitment, and thus influences organisational performance, human management and other mechanisms related to academic programmes (Shen, Leslie, Spybrook, & Ma, 2012).

The relationship between organisational commitment and loyalty is essentially formulated in the organisation (Aldas-Manzano, Ruiz-Mafe, Sanz-Blas, & Lassala-Navarré, 2011; Sampaio, Perin, Simões, & Kleinowski, 2012; Sargeant & Woodliffe, 2007). Commitment and loyalty are dependent on individuals' morals and behavior in the workplace (Foster, Whysall, & Harris, 2008). This group of variables contribute to behavior that supports the performance of the organisation (Ting & Yeh, 2014) and is also related to individuality in terms of the development of organisational performance at all levels (Kont & Jantson, 2014). Administrators, therefore, should be aware of procedures that support employees in the educational institution (Dorenkamp

& Ruhle, 2018). Organizational commitment and loyalty are reciprocal; employee behavior supports organisational performance until success is achieved as expected.

Trust impacts organisational loyalty largely based on emotional interactions. It is an asymmetrical relationship related to working procedures in the organisation (Perin, Sampaio, & Brei, 2007). Trust is a variable, related to other variables, that can develop loyalty among employees. Other related variables include satisfaction, organisational commitment, and values (S. H. Lee & Fenich, 2018). When trust is applied in the educational context, it becomes a strategy to enhance technical capabilities. If the employee has trust in the organisation, working procedures will run smoothly, resulting students learning; the main goal of an educational institution (Sampaio et al., 2012). Trust impacts loyalty whereby communication leads to the development of attitudes and workplace behavior.

Job satisfaction impacts loyalty in the workplace when an incentive, such as wage payments (Peltier, Pointer, & Schibrowsky, 2006), policies (in regards to internal employees) (Hoyt, 2012), and self-improvement campaigns for internal employees (Rojas-Méndez et al., 2009) are involved. Job satisfaction is an important factor leading to positive performance and results. To understand employee behavior, the leaders in the organisation must cooperate in setting the direction that will lead to the highest job satisfaction. These will also lead to loyalty, better performance, and better feedback about the organisation. Job satisfaction, therefore, is a positive emotion that brings about employees' loyalty.

Taking note of the relationships that impact job satisfaction are necessary for internal human resource management. Job satisfaction is the individual emotion that affects employee behavior (Locke, 1976, cited in Gruneberg (1979) and Aldas-Manzano et al. (2011)). External environments close by the workplace can influence the emotions of employees, both positively and negatively. Employees are part of the process that formulates the community and interactions within an educational institution. Demographic characteristics can be defined as gender (Foster et al., 2008), experience (Kenneth Leithwood, 2016), and age (Lesinger, Dagli, Gazi, Yusoff, & Aksal, 2016). These also affected by the instructors' behaviour according to their duties. Instructors will follow regulations as indicated by the organisation and these habits form the structures of the organisation which, in-turn affect employee

behaviour; such as the size of the school, the regulations, and the type of the school (Hulpia et al., 2009). This thesis examines the internal variables such as the dual system and private education, as indicated in Ministry regulations. The main concerns are; the quality of students, the structure of the academic programmes; the instructors; the supporting resources; the characteristics of the educational institution as academic entrepreneurs, and the interns.

The incentives used by the leaders focuses (mainly) on the achievement of the goals set by the organisation. Therefore, incentives are very important to persuading employees to fully and happily take part in achieving the goal, becoming attached to the common benefits, rather than personal ones. Employees must blend themselves into the organisation so that they can cope with both internal and external changes. An organisation's commitment strategy has become a theory that focuses on individuals feelings of attachment towards an organisation and happiness in the workplace (Allen & Meyer, 1990, p.2, cited in Weiherl and Masal (2016)). Hence, the form of commitment fluctuates according to the conditions which create a bond between the employees and the organisation such as the job satisfaction (Noe, Hollenbeck, Gerhart, & Wright, 2014). Commitment toward the organisation leads to better employee performance (Geer, Maher, & Cole, 2008). The overall picture of commitment has different angles because it depends on the strategy the administrators apply to arouse feelings of belongingness to the workplace and the character of the employees.

The goal of this thesis is to analyse the relationship between the behaviour of the instructor with the roles of the leader, as both the administrator and support staff. It also analyses the role of organisation commitment in a private vocational college using a dual system. This thesis will focus on the linkage between the variables on the quality of the relationships and loyalty as a fundamental norm in a career (Hart & Thompson, 2007). In addition, this thesis applies the criterion of how a vocational colleges and demographic factors related to the instructor affects the formulation of loyalty towards the private vocational institution. This leads to the analysis of the cause and effect of leaders and expectation in the context of Thai vocational institutions using a dual system. Moreover, this research looks for appropriate solutions for leaders to use administrative mechanisms and launch development plans

for employees. It explores the information about private vocational institutions using dual systems in Thailand that meet regulations set by the Thai Ministry of Education. It is hoped that this thesis provides more information in regards to how students and instructors in vocational institutions could adapt themselves to future changes in the labour market and economic circumstances.

1.2   Research questions

Research questions There are 5 major questions in the study as follows.

1) What kinds of leadership can bring about employee loyalty in a private vocational institution using the dual system?

2) What factors can promote leader loyalty in private vocational institutions using the dual system?

3) Is "needs satisfaction" properly to be applied to leadership models in order to promote behavioural outcomes among employees in private vocational educational institutes using the dual system?

4) What should the relationship and the quality of relationship be like between leader and employees to optimize loyalty towards leaders in an organisation?

5) Which demographic characteristics or qualifications of private vocational educational institutes using the dual system could lead to increased satisfaction or attachment to an educational institute?

1.3   Research objectives

This study has 5 main objectives which are

1) To study the characteristics of leadership that bring about loyalty in private vocational institutions;

2) To study the factors that promote loyalty among the leaders in a private vocation institution with dual systems;

3) To study the needs satisfaction dimension as a moderating variable among leaders that are influential towards the employees at a private vocational institution using dual systems;

4) To study the direction of relationship s between leaders in organisational contexts as important causes of leaders' loyalty to an educational institution;

5) To explore the requirements that promote loyalty of leaders as indicated in the regulations of private vocational institutions using dual systems;

1.4   Research assumptions

To study the performance of educational leadership and analyse the relationship between factors, educational leadership (transformational leadership and instructional leadership), needs satisfaction (autonomy, relativeness, and competence), relationship quality (trust, organisational commitment, and job satisfaction), loyalty (organisation and leader), institution structural, and school demographic by created in structural equation model, based on the following as ten hypotheses:

1.) Transformational leadership has a significant effect on loyalty;

2.) Transformational leadership has a significant effect on relationship quality;

3.) Transformational leadership has a significant effect on needs satisfaction;

4.) Needs satisfaction has a significant effect on relationship quality;

5.) Instructional leadership has a significant effect on loyalty;

6.) Instructional leadership has a significant effect on relationship quality;

7.) Trust has a significant effect on loyalty;

8.) Organisational commitment has a significant effect on loyalty;

9.) Job satisfaction has a significant effect on loyalty;

10.) Institution structural and school demographics have a significant effect on job satisfaction.

1.5   Scope of education and research base

To be effective, the scope of this thesis can be described as follows;

1) This thesis asks what kinds of analytical frameworks on leadership in educational institutions leads to better behaviour of educational employees. The choices are the analysis with the variables of satisfaction, quality of relationships, employees' loyalty towards the leaders and the contexts of the education institutions

(structure, dual system, demographic characteristics) that impact the loyalty of organisations and leaders;

2) This thesis looks at a population and samples in the survey that comprise educational employees in a private vocational institution using a dual system;

3) The goal of this thesis is to apply the variables in the model within the workplace so   employee behaviour and performance will be more positive;

Assumptions:

1) The tools applied to measure the variables in regards to educational leadership, desire, satisfaction, quality of relations, loyalty to the leaders, and the context of the educational institution must be concise and their reliability must be trustworthy;

2) The distribution of the sample selection must be normal and could represent the total population in this research;

3) Organisational leaders must give honest answers to the questionnaires of this thesis.

1.6   Limitations of the study

Four hundred eighty-four private vocational institutions are using a dual system under the authority of the Thai Ministry of Education and represent the level of analysis in this thesis. Specifically, for the educational institutions and entrepreneurs, the limitations can be clarified as follows:

First, dual systems are still very new in Thailand. Therefore, only a limited number of vocational institutions have been able to apply such a system. Yet, private institutions are more capable of looking for effective supporting resources and hence they are more flexible in terms of academic arrangements. Therefore, private institutions can launch dual systems before the latter. Employees of educational institutes must understand what a 'dual system' means when the survey is conducted. As a matter of fact, only employees with administrative positions possess knowledge in regards to dual systems. Sampling groups were not be those with authority such as directors or heads of departments. Therefore, it was very difficult to find participants and thus the number was smaller (than it should be) in each educational institution. In

addition, the design of the questionnaire has limitations in that questions do not cover all aspects of the participants. Additionally, the variables employed in this thesis; needs satisfaction, relationship quality and loyalty, are highly conceptual. Sometimes, the meaning of these three concepts overlap thus confusing study participants easily. The context of each workplace is different and might not cover all the behavioral aspects asked in the surveys. Finally, because the definition of 'dual system' is still ambiguous, it is difficult to indicate the exact number of vocational institutions that have launched it.

1.7 Significance of research

Numerous pieces of literature have explored the concept and aspects of leadership that lead to success and the implications of responsibility that can bring about cooperation. Employees will be persuaded to take part in important tasks assigned in the institution. The leader must indicate a clear direction and assign jobs to employees. Management depends on the leader's ability to interact with others (Firestone & Cecilia Martinez, 2007; Hallinger, 2003; Hulpia et al., 2009; Kenneth Leithwood et al., 2007; Sheppard, 1996). Interaction depends on context. Context may vary according to background and other factors (Aldas-Manzano et al., 2011; Hulpia, Devos, Rosseel, & Vlerick, 2012). Two concepts of leadership can be used for educational institution management.

Transformational leadership focuses on how to make internal employees aware of changes that affect the organisation. Leaders will try to adapt their vision to be in accordance with that of the employees. High-level of leadership skills are required so that everyone in the organisation is happy to cooperate with the leaders. Leaders must ensure that every part in the organisation follows the same direction and performs according to what is required by the institution. The institution will be firmly established and its growth supported by employee performance (Sun & Leithwood, 2012). Although leaders may try to pilot the institution with ability and skills, human minds are different; the leader must be able to promote plans for self-improvement among employees and make them aware of their own strengths (Brandt & Uusi-Kakkuri, 2016; Carter, Armenakis, Feild, & Mossholder, 2012; Gravells,

2012). One dimension of transformational leadership is that the leader must be able to explain his or her duty and responsibility. A leader can influence employees thinking; this is defined as 'idealised influence'. Explaining the vision and mission of the institution is defined as 'inspirational motivation'. Inspiring others to help one another in the organisation and to develop academic curricula, to support students, is defined as 'intellectual stimulation'. The promotion of self-improvement and skill development in an educational institution is called 'individualised consideration'. With these tools, the leader will be able to understand the employees and negotiate with the educational institution when compromise with the employees is called for (Podsakoff, MacKenzie, Moorman, & Fetter, 1990; Shih et al., 2012; Yıldız & Şimşek, 2016).

Instructional leadership is a characteristic a leader usually applies when an educational institution requires academic improvement through the support of the academic employees (Klar, 2012; Southworth, 2002). The dimension of instructional leadership is relevant to career development, such as one's vision, mission and goals allowing academic employees to understand the activities and practices of the educational institution (Alig-Mielcarek & Hoy, 2005; Sheppard, 1996). The appraisal employee quality can be an incentive to promote the continuity of academic improvement (Brandon et al., 2018; Hallinger, 2003). Accordingly, the quality of their performance will meet the expectations of the educational institution. Support for self-improvement and both long and short-term planning (administration and preparation) to cope with changes are crucial aspects (Sun & Leithwood, 2012). The implication of instructional leadership is that administrative actors can control the quality of education and ensure that it meets expectations according to the nature of students and characteristics of the instructors in various positions. There are indeed numerous ways to do this, not to mention differences in academic fields of expertise, that different leaders might employ. However, the leader must be able to set the criterion for internal appraisals, as it is important for the constant development of the institution.

Needs satisfaction references the emotions of employees at the educational institution. It references the internal energy that needs to be extracted for satisfaction and behaviour that benefits work performance (Deci & Ryan, 2000). As an internal drive and human emotion, the relationship to the workplace is an internal response

rather than external one because it is only known by the employees in the workplace, unleashed to achieve a goal (Kovjanic, Schuh, Jonas, Quaquebeke, & Dick, 2012). The analysis of satisfaction is part of self-decision theory (Deci et al., 2001). The decision to support relationships with others is certainly a basic psychological mechanism in the workplace (J. La Guardia, Ryan, E. Couchman, & Deci, 2000). The more an educational institution can extract one's ability, the better employee performance will be (Hetland, Pallesen, Schou Andreassen, Hetland, & Notelaers, 2011). Connecting with the leader at an educational institution is equivalent to a better connection with employee desire (Chiniara & Bentein, 2016; Hart & Thompson, 2007). Accordingly, satisfaction can be categorised in three ways; desire to be capable of doing something, desire to have freedom, and desire to have a relationship with others (Van den Broeck, Vansteenkiste, De Witte, & Lens, 2008). All of these are basic desires employees at an educational institution can use to benefit the organisation and themselves as they contribute to employee development and enhance the quality of everyday life in the organisation if proper decisions are made.

Relationship quality is the form of interaction at an institute that impacts performance and is only possible when appropriate behaviour internal employees is witnessed. The exchange of experiences and activities impacts the emotions of members engaged in interactions (Clark, Adjei, & Yancey, 2009; S. K. Roy & A. Eshghi, 2013). Relationships that meet the expectation of those who own it will strengthen the structure of the existing society (Ndubisi, Malhotra, Ulas, & Ndubisi, 2012; Santouridis & Veraki, 2017). There should be more than one appropriate behaviour of members at an educational institution because a variety of expectations result from both internal and external visions and missions. The expectation of educational institutions leads to a better quality of the relationships (Y. Lee, 2016; Snijders, Rikers, Wijnia, & Loyens, 2018). Relationships in educational institutions should be adapted according to a variety of contexts. For example, administrators must understand how to build up relationships among academic employees. Academic employees must think of what they should do to encourage the students to be successful and meet the expectations of the college (Steward, Wu, & Hartley, 2010).

Organisational loyalty is the result of exchanges, interactions and communication in the workplace based on the norms expected by relevant parties

(Hart & Thompson, 2007). Fundamental loyalty is implicit and originates from the continuation of repeated activities (Aldas-Manzano et al., 2011; Rojas-Méndez et al., 2009). The education institution should study these activities and use them to improve their human resources. There is also the possibility that developed human resources will form their own representations which are presented to outsiders (Sampaio et al., 2012). It is considered a success if educational institutions can attract instructors and students to work and study at their institute. It is also a success if instructors and students are constantly willing to cooperate in developing the organisation.

1.8   Definitions of terminology

1.8.1 Transformational Leadership (TFL) describes a leader who can persuade employees to perform their best so that the organisational goals be achieved. The demands of the employees are likewise understood and their goals are achieved as well.   The vocational institution needs to support its self-improvement and reorganisation according to the context of changes. TLF is therefore the outcome of a vocational institution that requires reorganisation for its students and employees. Therefore, the vision and mission of the organisation can be realised. The transformational leader has the responsibility to balance the support of both the educational institution and employees at the same time.

1.8.1.1 Idealised influenced requires a leader with special capabilities. He or she has a set of values and beliefs that are influential in terms of promoting the organisation's objectives and to ensure that they are achieved. These characteristics cause a leader to be respected and trusted.

1.8.1.2 Inspirational motivation is the characteristic of a leader who can represent the vision of the organisation so that the employees can see it very clearly. The leader must also persuade the employees to take part cooperation in a particular direction. Success can then be experienced by both employees and the organisation.

1.8.1.3 Intellectual stimulation can be learned and developed in order to support the employee's methods of problem solving. This characteristic makes a

difference at the educational institution as a workplace, including the ways in which people interact with one another in the organisation.

1.8.1.4 Individual consideration is the characteristic of a leader who can be the moderator between institution and employees. The leader must understand both parties and have ethics. The leader must also be able to give moral support to employees so that the latter can learn and develop their working career.

1.8.2 Instructional leadership (ISL) is very important to educational results and the academic growth of the students. Academic employees, persuaded by the leaders, are the key actors in making this possible. The instructional leaders must be able to explain the vision and mission of the educational institution with activities, monitoring and appraisal. The results will be used to support the performance of the educational institution. The leader has the duty to support employees so that they learn and develop academic skills as directly required in the pedagogical improvements. Accordingly, positive results will be achieved.

1.8.2.1 School-wide professional development is the process of long-life learning support for the instructors. Beneficial information also encourages human resource planning for the sake of goal setting in the educational system. To understand human resources helps support school instructors.

1.8.2.2 Defines and communicates shared goals is the cooperation and communication about the shared goals before common decision-making process is made. Solutions will be proposed. Selection of appropriate resources and outlining the steps for development will also be discussed.

1.8.2.3 Monitors and provides feedback on the teaching and learning processes when academic programmes are focused on and can be applied by instructors and students. Outcomes are the feedback given by the teachers and students which can be adapted in the future. There should be an academic society that supports performance so that the organisation can run programmes on time, without being obstructed.

1.8.3 Needs Satisfaction is one of the fundamental needs of a human being, according to self-determination theory. As human beings have different needs, the organisation must acknowledge these differences in order to persuade employees and

lead them in a direction that can benefit the organisation, appropriate to the level of competence.

1.8.3.1 Needs autonomy is the feeling that one accepts the environment around oneself. Employees in educational institutions can make decisions freely, and the institution enables employees to have a say in the policy making process.

1.8.3.2 Needs relatedness is cooperation in a single direction for success and confidence-boosting at the workplace. Relationships in the group or community are built up to complete a task.

1.8.3.3 Needs competence refers to the individual's attitude, that is, that one looks for success by oneself. What is required in this concept is that one must be able to cope with various circumstances.

1.8.4 Relationship quality refers to the interactions among the giver and the receiver of expectations and desire of both parties. Both have interests in terms of the relationship and desired behaviour. The exchange among groups happens as a result of set procedures. Behavioral variables are the conveyance of the attitudes and the cognizance of people involved in the interactions. The maintenance and development of relationships must be taken care of. The examples are: trust, organisational commitment, and job satisfaction.

1.8.5 Trust is the internal feeling of an individual that occurs as a result of more than two people's interactions. It is also the reciprocal expectation of different parties that could lead to either a growing relationship or a damaged one, if a party changes its behaviour that exploits the other. Therefore, trust occurs as a result of mutual benefit. It could be both symmetrical and asymmetrical, depending on the agreement, but must be reciprocal by its very nature.

1.8.6 Job satisfaction is the experience from work and the psychological responses that depend on contextual desires. Job satisfaction might result from other people's evaluation which man affect a person. The evaluation may be based on personal attitudes, values and experiences.

1.8.7 Organisational commitment refers to the interrelationship between individuals and the concerned organisation. The organisation can drive an individual to feel that they are a member. Benefits may vary according to the values and the beliefs the organisation wants to impart to the employee.

1.8.8 Organisation loyalty is the interrelationship between the employees and the organisation, and is built from a sense of belonging. The organisation expects its employees to be loyal to it. They will put their effort in their jobs and will have a positive mindset towards the organisation. This will result in positive behaviour that all tasks will be successfully put into practice.

1.8.9 Leader loyalty is the relationship between the employees and administrators based on a sense of belonging in the organisation. Leaders expect their employees to put effort into their jobs and have positive mindset towards the organisation. This will further result in positive behaviours that all the tasks will be successfully put into practices.

1.9   Contribution of this thesis

It is hoped that this thesis will help provide new answers in regards to the concept of leadership in educational institutions, as it examines issues that have never been researched before. The goals of this thesis are to more clearly define appropriate behaviour for leaders in educational institutions who have to face significant changes in the economic and labour market.

As dual systems are being increasingly implemented, this thesis aims to survey leaders' ideas, the structure of vocational colleges and the demographic characteristics that help promote organisational loyalty. The moderator variable, which refers to the quality of relationships, will be analysed. The thesis also searches for practical solutions that can help transform instructors' leaders that are suitable and beneficial to the development of a stronger foundation for vocational education in Thailand.

The empirical evidence indicates that there are significant implications for the moderator variables, according to literature on educational institutions with dual systems, and successful relationships between leaders and instructors. Therefore, this thesis will offer recommendations to vocational colleges in Thailand. These solutions will strengthen the relationships and understandings of leaders and increase their ability to develop their knowledge and human resources under their control. A friendly atmosphere has a positive impact upon the workplace. Administrators will be

able to expect employees to develop positive behaviour in their organisation that will enhance the quality of life in the organisation. More workshops that improve human capital, which is appropriate to this dual system, will be organised so that other educational methods are put into practice, in the future

1.10 Research proposal

This thesis is organized into five chapters. Chapter one focuses the background and problem statements addressed in this dissertation. It outlines the research questions, objectives, research hypotheses, scope of the study, limitations of the thesis, significance of the thesis and the technical terms of variables. Chapter two presents a literature review by overview of the meaning, describes relationships among factors, and provides a theoretical framework for the research. Chapter three presents the methods and procedures used in the study, defines the statistical strategy for samples and gives details of the questionnaire survey.

Chapter four presents the results of the study. Chapter five highlights the discussion in this dissertation and illustrates implications for further study.

1.11 Summary

This chapter has discussed the importance of the application of the dual system in private vocational colleges. It is important that other sectors under the Ministry of Education consider implementing a dual system in the future. This thesis focusses on variables in regards to employees, the measurement of their behaviour and their understanding of the problems. This chapter has further discussed the objectives of the thesis, the hypothesis that is its foundation, and the implication of the variables as a survey of the possibility of employees to become leaders themselves.

CHAPTER 2

LITERATURE REVIEW AND RESEARCH FRAMEWORKS

The structure of this chapter is classified by variables from research framework. In each section is contain with an extensive literature review of construct, a review of relationship between variables, and an explanation of education context. The concepts and theories to be reviewed include the concepts of leadership in educational institutions, relationship quality and loyalty.

2.1   Leadership in educational institutions

There are many aspects of leadership. However, transformational leadership and instructional leadership are found in most literature. A number of scholars employ the concept of the distribution of leadership functions in formulating tools to test leaders at educational institutions. For example, Hulpia et al. (2009) explained that the example of the distribution of leadership functions are to support teachers and supervisor teachers. The duty of the instructor is defined with the models that are concerned with the concept of leadership such as the instructional leadership and the transformational leadership models. The support teacher is examined with transformational leadership, as this group focuses on how the vision of each educational institution should be set up. How to create incentives to persuade academic employees to perform their best is another concern. The instructional leadership model is used by supervisor teachers because this groups sets up the framework to control and monitor the school. Moreover, how the concept of leadership is defined by scholars is worth discussing. For example, Firestone and Cecilia Martinez (2007) said that leaders at educational institutions should use characteristics of democratic leadership. This includes the norms that offer authority to the teachers and the sharing of leadership among themselves. There are other points of view that are not included in these norms. However, a leader and employees are

expected to perform depending on the context. According to Elmore (2000), it is important to pay attention to a leaders' influence on employees. In other words, the employees will follow the direction given by a leader. Mission, vision and goals will be all be embraced by them. What should be the focus are the cultural context, the common decision-making process, and career appraisal and development in the workplace. The ways in which a leader should behave are also included in the conversation.

2.1.1 Transformational leadership

This concept must be explained in two steps; a leader and transformation. According to Muterera et al. (2018), a leader of an organisation should try to implement policies and make employees feel satisfied so the goals of an organisation can be successfully achieved. The term 'transformational' is first explained by Downton (1973) before it is added by Burns (1978). Afterwards, Northouse (2013, p. 186) summarised that it is, "the process whereby a person engages with others and creates a connection that raises the level of motivation and morality in both a leader and the follower". Weber, Henderson, and Parsons (2013) employed the concept of charisma to elaborate how leadership should be defined. Socialised charisma can impact followers. Also, when leaders use it for personal ends, the situation is defined as 'personalised'.

Transformational leadership indicates that a leader is concerned with how to improve and develop organisational performance. The goals will be achieved and new goals will be created to replace old ones. Overly specific kinds of procedures in an organisation should be decreased. Moreover, a leader should be able to put policies into practice; implementation. He or she must have a vision of success, and be confident and mentally strong. Therefore, he or she must be supported by their employees (Ariyabuddhiphongs & Kahn, 2017; Bass, 1985; Weber et al., 2013). This is in-line with what Top, Akdere, and Tarcan (2015) suggest. That is, that a transformational leader is someone who has the duty to transform an organisation and its members. He or she must be able to use incentives to persuade others to perform as expected according to the vision, mission and goals of an organisation. Tichy and Devanna (1997) similarly, agree with this definition. The concept of transformational

leadership is exercised for the better development of an institution's ability to cope with change in the international market. Changes are what the transformational leader should employ to increase his or her support for their vision. This is because transformation impacts communication and the participation of employees. Carter et al. (2012) state that if a leader has experience, employees will have confidence in the organisation, despite significant change.

The concept of transformational leadership therefore has a crucial role in team-building, moral support and incentive-development. Employees are empowered in their own development so they can adapt to a variety of steps in working procedures. A leader who is more concerned with an organisational benefits rather than personal benefits will lead more effectively. This is attached to ethics and morality. This kind of leader would not criticize employees in public (Boer, Deinert, Homan, & Voelpel, 2016). When this concept is applied in educational contexts, Sun and Leithwood (2012) state that transformational school leadership requires moderator variables or mediating variables to support the results of student academic curricula. These variables depend on the context of an organisational leader. The demand for responsibility is the policy connecting the exchange between others with a leaders' duties. This kind of responsibility is callead transactional practice and is necessary for all successful students. An organisational context is related to a leader's duty and the upgrading of techniques employed in each organisation. The concepf ot transformational leadership and instructional leadership must be integrated is necessary to educational leaders. The academic results of the students are not the only concern, because the behaviour of management can also lead to success. Management-by-exception occurs when leaders do not conform to institutional regulations or put any policies into practice. The educational leader should analyse various factors in the educational institution, such as the classroom and the behaviour that affects students. This is the reason why there should be mediator and moderator variables. Transformational school leadership is the varaible in forming an indirect influence on students.

Podsakoff et al. (1990) argue that the duty of a transformational leader is related to the role and relationship of organisational transformation. A leader should be able to identify and articulate their vision for the future. A leader should also be

able to provide an appropriate model, in terms of behaviour and values, to foster the acceptance of the group expectations, to help e followers understand the performance expectations and to understand how to provide individualised support. A leader would challenge followers to perform their best and improve their performance. This is defined as intellectual stimulation, because the transformational leader understands the objectives and current condition of an organisation. He or she would acknowledge employee demands and, hence, can attract people to work with him or her. These characteristics are considered incentives that propel an organisation to achieve its goals. Kenneth Leithwood and Jantzi (2005) propose that when a transformational leader persuades followers to share their knowledge with others, the personal characteristics of followers will determine if they will follow the guidelines or not. While some are willing to share their knowledge with others, some are not. Such is the process when an organisation tries to transform individual knowledge into organisational knowledge. It can be said that transformational leaders are those with the most effective communication skills. Their skills of persuasion help enhance their image. These skills are best witnessed when leaders understand the right context of when and how to use different forms of communication. In short, transformational leadership can be witnessed when a leader has developed the knowledge and creative culture of leadership in his or her organisation (Brandt & Uusi-Kakkuri, 2016).

The role and duty of the transformational leader in an organisation can be categorised into four types. Shih et al. (2012) define the first as idealised influence. This means that followers are directed to work for a leader – and an organisation – based on the set up of an organisation in its initial stages. When trust is strengthened, common values arise a common direction emerges. Sincere cooperation takes place, employees trust that their individual objectives will not damage cooperation in an organisation. Second, inspirational motivation is the ability to forecast the future and explain how an organisation's vision applies to its members. Guidelines should be provided so members can understand the kind of behaviour expected in the workplace. Employees move forward together to achieve the same goals. Third, intellectual stimulation is a leader that challenges and gives support to employees so that they can solve problems. The core value is to give support to employees and share knowledge among them. Therefore, interactions that take place among

colleagues lead towards cooperation and, eventually, the realization of the same goal. Members' confidence is boosted as a result. The last type is a leader with individualised consideration, which refers to a leader's ability to pay attention and listen to their followers. According to Yıldız and Şimşek (2016) who employed the Bass' transformational leadership concept, once a leader using idealised influence is trusted and respected, he or she is more enthusiastic in steering an organisation towards success. Meanwhile, intellectually stimulating leaders constantly look for opportunities by studying and improve themselves. They offer support to their followers to find a new job with the transformational environment and know how to challenge themselves. The inspirational motivation-type leaders have their own methods of communication and persuasion to help followers understand actual conditions. Goals and success of an organisation are clarified, accordingly. Leaders who use individualised consideration are mediators who always help employees and provide them with guidelines for success. According to the social exchange theory, people help those who helped them in the past. Similarly, when laborers' are paid attention by the transformational leader, they will try their best to complete the task assigned to them and, thus, the objectives of an organisation are achieved. The research of Wu and Wang (2012) explain the relationship between charismatic leaders with others. In this relationship, followers see the vision and are enthusiastic and hence bold enough to take risks. Hollander and Offermann (1990) add that the main characteristics of this type of leader can be categorised into three types; those with attitudes and behaviour, those who adapt themselves to different situations and those who observe. When this explanation is applied to Chinese society, it is found that most Chinese business are directed with family connections as a result of Confucianism. This is therefore in-line with the idealised influence leader. As part of transformational leadership, a leader must be attached to moral and ethical considerations and must be sympathetic with their followers. These characteristics will lead to the improvement of group performance (Antonakis & Atwater, 2002).

According to research of K. Leithwood and Levin (2008), a transformational leader at a large educational institution that tries to transform itself, should share information on the activities, goals, objectives and vision of an organisation with its followers. Goal-based theories aim at bridging different group visions by establishing

common goals leading to increased performance and more effective communication. The goal here is to provide an organisation with intellectual property by employing intellectual stimulation and individual support based on appropriate values and approaches. To look for cultural strengths, to restructure an organisation, and to set up the steps for cooperation are therefore necessary steps. However, there must be process of checks and evaluation for future improvement. Employees that are not productive should be monitored and appropriate resources for school improvement distributed. This is in-line with what is expected from instructional leaders (Kenneth Leithwood & Jantzi, 2005) who employ TFL concepts that focus on the learning climate as well as norms and values involved in the learning process. Employees must be professional in upgrading the educational institution, which includes three cultural variables; first, organisational values which are seen when cooperation, innovational support and decision-making support are called for. Second, an organisational climate, indicated in social relationships, the open communication system, and among colleagues. Third, the model evaluates how a leadership impacts the cultural context of the institution. This is another popular moderator variable used in the analysis TFL.

The research of Gravells (2012) explained that the ability to develop one's strength is a characteristic of TFL that a leader should have. In each organisation, a leader's personality can be very influential. TFL contributes to a clearer vision and goals of an organisation. He or she may persuade instructors to continue their self-improvement. Therefore, transformational leadership is supportive leadership (Hulpia et al., 2012; Kenneth Leithwood et al., 2007). Transformational and instructional leaders are key actors in promoting educational reform. Instructors should be empowered, granted partial leadership, and continue their self-improvement. This is a reflection of normative transformation inside an organisation. Most organisations expect to have a transformational leader who focuses on the development of an organisation and innovation. This is different from instructional leaders who focus on controlling and monitoring of academic programmes and curricula (Hallinger, 2003).

It can be summarised that the definitions of transformational leadership are numerous. A leader has the duty to cope with particular circumstances, policy and changes that affect an organisation and the employees (Carter et al., 2012; Podsakoff et al., 1990; Sun & Leithwood, 2012; Top et al., 2015). The transformational leader

therefore is a central figure who must implement benefits to the employees and an organisation (Boer et al., 2016) and persuade their employees to perform to the best of their abilities (Kenneth Leithwood et al., 2007). A leader must be able to train employees to adapt themselves to the contextual changes affecting an organisation (Gravells, 2012). A leader is not the only key for success but he or she represents organisational harmony best seen among employees. A leader must continue learning and understand the nature of their followers and an organisation to attain balance in the administration. The concept of transformational leadership can be categorised into four types (Shih et al., 2012). First, the dimension of idealised influence; this type of leader sets values which impact employee performance. Then may then be persuaded to perform their best. Second, the inspirational motivation focused leader will be able to arouse emotions that lead towards success. The vision of an organisation and its employees must be focused in the same direction. Next, the intellectual stimulation leader creates new angles and challenges for employees to launch new initiatives. They are persuaded to solve the problems in a new way. A leader must interact with their followers so that they are aligned with an organisation. The last type of a leader uses individualised consideration. This leader pays attention to their followers and listens to them about their life and working environment.

2.1.2 Instructional leadership

Southworth (2002) cites the definition laid out by Kenneth Leithwood and Jantzi (1999) that refers to the "behaviour of teachers as they engage in activities directly affecting the growth of students". Their behaviour can be described as narrow when a leader tries to strengthen learning processes among students. When behaviour is described as 'broad' an organisational and cultural forms of the instructors became the focus. Apart from differences in terms of duty, both direct and indirect influences from instructional leadership can be witnessed. This kind of leadership is connected with the meaning of the school's mission. The pedagogy of academic curricula and contextual changes in the school must be the major concerns. This is in-line with the definition of Sheppard (1996) who argues that 'narrow' refers to the direct impact of leaders on teaching and observation of learning processes, such as the class monitoring, while 'broad' impacts are the behaviour of a leader that affect all students

in the class which are the most accepted and examined. In sum, the behaviour of management directly affects academic behaviour in terms of the improvement of teaching.

The unit of analysis of instructional leadership should be described at many levels according to Ng et al. (2015). One of the many sets of detailed explanations is that a leader's behaviour has a direct relationship with the teaching process; such as classroom observation. The overall explanation is that indirect relationships with students can be the cultural context at a school. The personal leadership of the school director impacts the learning of the students. One of the most important dimensions is that the director must promote the goals of the school. The objectives of the school, cooperation in terms of academic arrangements, the evaluation and guidelines of the academic programmes, and follow-up regarding the improvement of students should be the school's major concerns. Moreover, a leader should be able to make time for academic productivity, to make sure that all the income is distributed to all employees, to make sure that employee ability and skills are improved and that levels of performance maintained. The main idea here focuses on group performance and does not pay attention to the role model of a single instructor. The creative activities of an organisation, under certain limitations, are focused on how to produce academic media, how to develop innovation, how to distribute resources, how to provide academic guidelines and in providing support to instructors at both the individual and group levels. Similar to what is indicated by Klar (2012), the variables of leadership can be witnessed in those who hold school director positions. Beginning with academic initiatives that aim at promoting the best academic environment and success among students, many obstacles to the instructional leaders can be observed. For example, the school location, the authority to promote innovation, and resistance to change within the school itself.

A method of distribution of leadership may improve an individual's academic ability. In this view, charismatic individuals are the focus. The understanding of how tasks should be assigned to instructors so that they take part in different activities, as well as the interactions of the employees at many levels, departments and committee in the institutions are the major concerns. Therefore, the unit of analysis is concerned with task distribution and how individuals cooperate to exhibit their leadership.

According to MacBeath (2005), three steps of development should be examined. First, the formal and cultural structures which indicat the ability of the representatives of an organisation. Their responsibility must be in-line with an organisation's responsibility. Second, the vice-director who helps the director to explain the identity of an organisation to others. Moreover, the vice-director should be a key factor in helping to explain the school leaders' abilities, taking care of the school, and promoting the participation of employees and organising major academic activities.

According to Brandon et al. (2018), instructional leadership does not focus on a single person, but rather the distribution of leadership to all parts of an organisation, to promote community learning. Challenges to instructional leadership include the time of teaching evaluations and support of the improvement of quality of learning processes. There are three kinds of challenges. First, internal management. Financial management requires time. Understanding parents and students is also a prime concern. The internal systems of schools and teachings should be paid attention to. Second, complex challenges occur when the development teaching is called for. The instructional leader must understand inter-personal desires and each individual's intellectual property. The complexity of the monitoring and job evaluation are also important factors. This is because what is inside the instructors cannot be recorded according to organisational practices and policies. Unexpected extra-jobs arise, creating difficult learning challenges. Therefore, to be an instructional leader, one needs to develop one's knowledge and other necessary skills not expected in mundane jobs. According to the explanation given by Hallinger and Murphy (1985), the concept of behaviour can be defined as a mission to manage instructional programmes and to promote school climates. Instructional leadership focuses on the implementation of strategies to optimise change efficiency and the development and upgrading of academic programmes. The core leader of the academic institution is the key actor promoting change. A leader's duty is to cooperate, control and provide guidelines for the development of academic programmes for the institution. This concept is initiated at a primary school in a city with a high-rate of poverty where it is felt significant change is required. A leader is required to be mentally strong with the necessary direct authority to demand change; his charisma is a crucial element. Moreover, a leader has to mingle with the academic programmes and possess

relationships with teachers. However, the objectives of a leader are still narrow; performance did not cover many areas that would lead to goal attainment in terms of cultural innovation and teaching at the school (Hallinger, 2003). This is in accordance with the behaviour as explained in the research of Ilgan, Parylo, and Sungu (2015). Part of the verification of the instructional leadership that the concerned school director has to possess is the monitoring of work, academic programmes and other activities. The director focused on the cooperation, transparency, accountability and the trends of needs among instructors. Cooperation among the instructors and the director must be in the same direction and one must learn from one another. The task of monitoring others has positive and negative sides. Some instructors are scared and tried to resist the monitoring activities because their attitudes and perceptions are different. If the director did not have sufficient interpersonal communication skills and interactions, he or she would not be understood, and would not understand why certain skills of instructors are missing. In addition, they would not be able to share the understandings of an organisation with them. The director would not be able to persuade instructors to fix problems and improve their behaviour, either. Therefore, the director should be aware of the duty and responsibility to make the instructors satisfied. The quality of the school and the instructors' performance will be upgraded as a result.

The activities of instructional leadership are explained by Tan (2012) who looks particularly at teaching strategies in the classroom, and the relationship between understanding vision and academic format and clear goals. Stakeholders who devote themselves when they taught did so in order to attain the goals of an organisation. This included trust that occurred during the moment's cooperation. In this situation, one can witness supervisory leadership (Hulpia et al., 2012). Therefore, instructional leadership is the most suitable, according to Halllinger who further adds that this type of leader strives for his or her best to improve the school. The instructional leader creates a culture of learning which leads to economic growth. Therefore, students' specific abilities, such as transcultural communication, are supported. The instructional leader must be capable of developing teaching strategies. The paradigm is transformed here from someone who takes knowledge from somewhere into creating knowledge through action research. A leader must be able to solve problems

through four main steps. First, problem identification, second, designing hypotheses testing, third, efficiency evaluation. Finally, reflection on results to look for the answer to the research questions. The duty of the instructional leader is to find the gaps between theory and findings. Strengths and weaknesses should also be identified based on the context and the vision of the institution. A leader must further try to convey the message in regards to the goals and objectives of the students, staff, the stakeholders. This kind of conveyance, in regards to the application of the knowledge, is very difficult to witness in the real-world situations. There has hardly ever been this kind of communication. The overall picture of the instructional leader who is creative is, of course, contextual. A leader should be aware of when and where to conduct research and when not to. Action research helps instructors become more professional in terms of analyzing the problems that might arise, adding value to the academic procedures.

The research of Alig-Mielcarek and Hoy (2005) looked at similar types of duties in the instructional leadership models compared with Hallinger and Murphy (1985), Murphy (1990) and S. C. Smith and Piele (1997). The model described by Hallinger and Murphy (1985) in three ways. First, defining the mission, which focuses on framework identification of communication and goals. Second, instructional programme management is the framework employed to evaluate academic programmes, to bring about academic cooperation and to survey the student achievements. Third, the promotion of school climates, focusing on individual support and development so that organizational goals can be achieved, attracting employees and students to remain in an organisation. Murphy (1990) developed an instructional leadership model, focusing on methods to make an educational institution more effective. He aimed to develop schools and encourage employees to adapt themselves to upcoming changes. Academic programmes are enhanced and the role of the administrator in monitoring the quality of the academic programme is increased. Murphy argues that administrators should have direct contacts with students. This called for the development of a second dimension. Then, a fourth dimension is mentioned which is about how to develop an atmosphere to support the working environment. This support would bring about cooperation among employees and students; the search for external resources for more security and the connection of the

real life and life at workplace. The model by Weber (1996), proposed that the duty of a leader is not only concerned with administration, but also about knowleadge and the development of knowledge. This model of instructional leadership is in-line with other models as mentioned above. However, the model of instructional leadership here adds more details, and so is more multi-dimensional. For example, it adds to the instructional model of Alig-Mielcarek and Hoy (2005), through the following characters: first, how defining and communicating goals brings about cooperation and communication and a more clear decision-making process. Here, directions, appropriate resources and steps for future development can also be proposed. Second, monitoring and providing feedback on teaching and learning process occurs when a leader focuses on the development of academic programmes, taking into consideration student and teacher comments about the revision of academic programmes. An academic community, thus, should be formed to support development procedures so that they are not be obstructed. Third, promoting and emphasising the importance of professional development refers to the support of life-long learning for the instructors. The information should be employed for the benefit of an organisation in terms of planning for individual development and the goals of the educational institution. This type of leader understands the resources used to support instructors at school and is used to create a tool known as the Instructional Leadership Inventory (ILI). The theory of goal-setting of Locke and Latham (1984, 1990, 2002)is applied to challenge and persuade the employees, offering incentives with specific goals. Examples can be witnessed by observation and an evaluation by individuals.

The development of questionnaires is used in path analysis, particularly in analyzing the relationship between instructional leadership and academic press and related activities. Relationships are measured according to variables of student achievement and their socioeconomic status (SES). Results show that the relations of the instructional leadership are significant with all variables in the same direction. The is instructional leadership impacted students' needs is contextually appropriate. Therefore, to apply instructional leadership, many kinds of components need to be taken into account so that success can be applied to an organisations' performance. Kenneth Leithwood (2016) discusses models of reformulating policies aimed towards

the head of the instructors and directors. Instructors that are also administrators at the medium-level are assigned to evaluate and monitor their colleagues. Heads of the instructors are not be included in the process of proposing any academic direction or supporting students. Therefore, the division of labour is clearly indicated; who are instructors and who are administrators. This is called leadership distribution. However, at an educational institution, an instructional leader focuses on internal cooperation. The formulation of leadership structures among instructors is very challenging in schools. The formulation should be developed so that schools can be upgraded. The initial phase of the development is the formulation of an academic community where everyone is aware of the duties of the instructional leader. The results are relevant to the learning process of students rather than the overall picture of school or a leader of the educational institutions; its core is concerned with well-functioning departments in an organisation. This is a major source of energy for development rather than the leader's performance is he workplace. A leader should be able to arouse employee emotions at work in accordance with the context. The duty of a leader, thus, is to be active in understanding the different roles of different departments in the school.

In conclusion, instructional leadership is about the relationship between the behaviour of a leader and the followers in an educational organisation; the organisation focuses on how to improve its employees in-line with the objectives of academic activities. Certainly, improvements are related to students (Ng et al., 2015; Southworth, 2002). Although there are deep and broad categories, all the goals and meanings relate to how leaders arrange and lead students to attain academic achievements (Hallinger, 2003). What should be the major concern of the instructional leader is that there are a number of different levels and backgrounds of employees in any educational institution (Klar, 2012). The duty of a leader there, is to monitor and evaluate the instructors. The results can be used to plan for future development. Details are appropriate to the kinds of the tasks assigned (Brandon et al., 2018). Administration by an instructional leader is comprised of strategies in-line with the vision and goals of stakeholders at educational institutions. This leads to better understandings and cooperation in that employees should follow what is indicated by a leader and an organisation. The strategy employed by leaders is to

monitor and evaluate the performance of employees. Hence, the problems and new methods of education inform one another (Hulpia et al., 2012; Kenneth Leithwood, 2016; Tan, 2012). Participation of all parties is crucial to paving the way towards implementation and is widely accepted by internal employees. Increased understandings of what employees' cope with made them feel that they are better taken care of, meaning an organisational leader is aware of the actual problems.

2.2   Behaviors of personnel in educational institutes

Several studies mention the effect of instructors' behavior on students. Perkins (1965) argues that the roles or behavior of instructors affects academic achievement, including teaching style and criticism on learners. Instructor behavior should be appropriate to each learner. Thus, behavior can make learners succeed or fail, according to the context. Therefore, the survey of instructional plans among instructors who gained insights into educational objectives considered the characteristics of learners and estimated the educational outcomes of particular instructional strategies. The cognitive processing of instructors made them realize how to design their own behavior in response to different plans. Instructors should have a flexible teaching capability, as well as language skills in order to respond to different operations and enhance integration into education. Similarly, according to Ryans (1963), the difference in behaviour should lead to diversity. Teaching is similar to a kind of service to fulfill needs and used to assess sourcing and management. The response of administration to teaching outcomes is often job promotion, the removal of inappropriate leaders, or rehabilitation. Thus, the effectiveness of teaching is related to behavior. Behavioral research aims to understand the teaching process, the limitations of instructors' efficiency, and the motivation and guidance for achieving desired results. Such information-processing systems are being applied by executives. The behavior of instructors affects the results of educational institutes.

According to Blumenfeld and Meece (1988), the creation of perceptions among instructors depends on how to create or preserve an environment and the possibly of contributing to or eliminating the effects of attachment of learners in classes. Instructors should proactively provide proper guidance and observe the

relationship between information and learners' perceptions, teaching material management guidelines, strategy implementation, and feedback on operations. Therefore, instructor behavior is inherently connected with as tasks are associated with educational institutes. Working process and outcomes are linked to academic viewpoints and the management of instructors' behavior, which is influential to learning. Learners perceive different types of knowledge required for learning and the significance of education.

From the viewpoint of instructor behavior, in addition to the understanding of educational institutes as mentioned earlier, the study of Medley and Crook (1980) explains that teacher competence depends on the characteristics of instructors in response to contextual factors. They argue that developing instructor efficiency may be better than job-based development. In other words, developing instructors' behavior can lead to better contextual management; including the promotion of knowledge, skills, and attitudes appropriate at work. Based on the analysis, executives in educational institutes desire most that instructors realize their key responsibilities, then, efforts to promote cooperation and understandings about the effect of operations on educational institutes can be designed. Other factors to consider are the environment, that affects teaching and learning of both instructors and learners, and the expectations of potential success. Therefore, instructors and educational personnel need to perceive their own position in operations or educational institutes and try to adjust their job level appropriately so as to respond to high-level operations. The behavior of instructors being trained to become leaders expect that personnel in educational institutes would be offered to opportunity to develop their professional capabilities (P. Campbell, Chaseling, Boyd, & Shipway, 2019). Thus, it is not unusual to motivate instructors to realize targets by enhancing their leadership skills. Behavior exists beyond feelings towards the educational institutes, jobs, or colleagues, and involves all personnel. Instructors are not only those who manage classes, but those who optimize educational institutes for all. In addition, the overall behavior of personnel in educational institutes forms a unique culture. Every person in an educational institute, including executives, instructors, and learners, gained insights into their own roles, leading to integration for learning purposes (Kazak & Polat, 2018). Thus, different behavior is mainly derived from the diversity of people in

educational institutes because educational institutes are the place for producing personnel who then return to society. Accordingly, the study of Sebastian, Allensworth, Wiedermann, Hochbein, and Cunningham (2018) explains that the modification of behavior using guidelines on personnel promotion in educational institutes through measuring the achievements of learners and improving personnel (such as professional development, providing feedback, or coaching) are management process for the purpose of producing positive outcomes predicting operational and instructor outcomes. It is important to enhance non-instructional behaviour and to understand the responsibilities of executives. The relationship between behavior and creative leadership is connected with educational institute management principles so as to ensure suitable standards for the success of learners is achieved. It is difficult to indicate any favorable behavior due to diversity.

Hong (2017) explains that instructors perform favorable behavior when they personally believe it would enable them to work efficiently. However, other factors that can affect the behavior of instructors, apart from their own capabilities, might be the trust of parents and learners, as well as feelings of being and belonging to a part of the curriculum. When combined with positive attitudes towards educational institutes, the design of the unique culture of an educational institute can begin. Therefore, support from executives in educational institutes is a key factor contributing to the favorable behaviors of instructors, such as promoting the career path of instructors, or creating suitable environments for high quality teaching outcomes. The relationship between the behavior of instructors is inevitably connected with the growth of learners. The elevation of instructors' showed some positive outcomes in educational institutes, according to Klein (1971), who argues that the modification of behavior must be reviewed by supervisors for quality improvement. The study of Bellibaş and Liu (2018) mentions the relationship between leaders and followers, stating that some factors, such as situations, encourage subordinates to become skillful and adept. The interaction with behavior is derived from the interaction between personnel and the scope of work that creates roles as required by educational institutes. Thus, the behavior of instructors, in terms of learning or building networks within educational institutes, is related. Favorable behavior in educational institutes can improve curricula and teaching (Sebastian, Huang, & Allensworth, 2017). This behavior

includes the potential to clearly identify variables when executives comprehend the role of instructors, the realization of the implementation of educational institutes, perceived contextual changes, and the collection of best practices of other organizations with similar management to explore proper behavior in order to improve management quality. As it is difficult to determine organizational behaviour, an organization might experience delays in managing possible changes. Favorable behavior must be tested and sought out under the supervision of executives or leadership with an eye on the key success factors for learning.

2.3 Relationship quality

The relationship quality affects interactions among different actors.Kuhn and Mostert (2018) state that when a specific relationship between the giver and receiver is acknowledged, relationship quality is altered. The result of the loyalty to an organisation can be witnessed in the form of profits, in-line with the definition laid out by Santouridis and Veraki (2017) who argue that the strength of a relationship and the presentation of desire and expectations of a group generate feelings. When one has an experience of success, similar to a feeling in their past, the level of the relationship concerned with the consciousness of desire, expectations, goals and satisfaction will increase. Here, certain behaviour is expected to be maintained where the objective is to maintain the quality of a relationship in many forms when there is interaction between different actors. Ndubisi et al. (2012) state that the quality of relationships mainly depends on organisational performance. This can be applied to the relationship between a company and its customers. This framework has been used to analyse trust in organisations, as well as the customer commitment, relationships and satisfaction. The relationship between the three variables is not independent and is categorised by the measurement of attitudes based on social exchange theory.

The exchange found in the relationship can be seen to lead to an increased willingness to reward others. Common elements in the social, psychological and economic conditions that overlap one another can be observed. However, economic exchanges are different as there is no agreement in these situations. These exchanges are influenced by the market and the quality of the relationship. People chose the quality of relationship only when they engage in social exchange with more than two

groups. According to Carter et al. (2012), a social relationship is applied within the framework of exchange among leaders and members of an organisation (Graen & Uhl-Bien, 1995). Within the concept of leader-member exchange, a social relationship contains the aspects of loyalty, contributions, and professional respect attributes which characterise the relationship between administrators and employees as they attempt to bring success to their workplace. The quality of relationships supports an employee's plan to adapt themselves and support administrators. Likewise, when quality of relationship concerns is brought as a concern to administrators, it is hoped that the employees' behaviour will change and improve effort in the workplace. This is in-line with the theory of social exchange (Blau, 1964) and it is indicated that the relationship between employees and the administrator gives rise to tangible and intangible, namely respect, trust and other benefits provided by the manager. These helped upgrade the behaviour and performance of an organisational employees. The external environment affects the performance of the behaviour and may lead to certain kinds of obstacles and changes that cause bad performances. Therefore, good relationships need to be maintained and employees supported so that they have a good experience within an organisation.

S. K. Roy and A. Eshghi (2013) state that the quality of relationships is a key factor that leads to customer loyalty and the improvement of further relationships. Its components include satisfaction and trust. These factors help maintain a high level of relationships and enable an organisation to continue to make profits. The quality of relationships is considered as part of the overall evaluation of the strengths of an organisation. There are opportunities to understand desire and expectations from records of how customers respond in certain kinds of situations. Clark et al. (2009) explain that the components of which make up the 'quality of relationships' fortify strength exchanges within the organisational. Details of each component can be explained as follows; satisfaction is one form of emotion customers' gain from past experiences. Meanwhile, trust, integrity and commitment are among factors behind the drive to maintain relationship in the long term. The table below shows qualitative variables of relationships as discusses in relevant literature and will be used in the summary of this thesis.

Table 2.1 Literature review of relationship quality variable

Literature/ construct	commit ment	trust	satisfaction	intim acy	mutua lity	commun ication	Affective conflict
Kuhn and Mostert (2018)	✓	✓	✓				
Y. Lee (2016)	✓	✓	✓	✓	✓	✓	
Santouridis and Veraki (2017)		✓	✓				
S. K. Roy and a. A. Eshghi (2013)	✓	✓	✓				
Clark et al. (2009)	✓	✓	✓				
Snijders et al. (2018)	✓	✓	✓				✓
Ndubisi et al. (2012)	✓	✓	✓				
Steward et al. (2010)	✓	✓	✓				
Ting and Yeh (2014)	✓	✓	✓				

An explanation on the quality of relationships is offered by Santouridis and Veraki (2017) who say that the quality of relationship model has a natural dimension. When each variable is disaggregated, they became disaggregated constructs and are better than when they form only a single component. The most important components are satisfaction, trust, expectations, satisfaction, reliable communication in an organisation, the desire not to take advantage of others, and trust. Therefore, the quality of relationship is a response rather than an exchange of experience. Y. Lee (2016) offers three models of this concept, explaining the pros and cons and the suitability of each to particular situations. A second-order hierarchical model is used to study the natural structure. In total, there are three models; the universal model which interprets that individuals are not different; the factors applied to groups are also applied with the individuals such as trust, commitment, relationship satisfaction and intimacy. The drawback of this model is that it does not pay attention to the particular character of individuals. Second, the independent model shows the factors contributing to the quality of relationships. The independent model has different components as the interpretation of relationships by the group is significantly different from individuals. When the interpretation is tested and transformed into statistics for confirmation, it is difficult to explain the social context. Last, the group model emphasizes interrelated internal factors. Normally, this model is employed within specific structures. Due to the different levels of analysis, internal variables must be disaggregated as one variable has multiple impacts. An example can be found

in the work of Cho and Park (2011) where it is obvious that the quality of relationships is internal and is present in the group model. Their research looks to describe which kind of trust impacts job satisfaction and organisational commitment. Results explain different contexts, behaviour, performance results, attitudes and awareness of structures. Employee satisfaction and organisational commitment is a form of attitude within the institution. To examine satisfaction is the evaluation of exchange. To analyze organisational commitment is to understand the incentives that lead to attempts to achieve organisational goals.
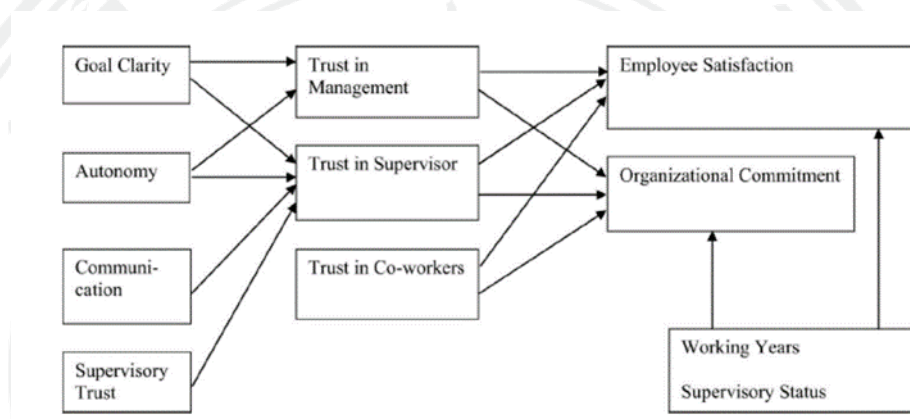
Figure 2.1 Model of trust
Source: Cho and Park (2011, p. 556)

Each dimension affects other dimensions. Examples can be found in a range of literature in regards to the context and the levels of implementation. For example, Steward, Wu and Hartley (2010) argue that variables are multi-dimensional and affect the quality of the individual and organisation. The variables are trust, satisfaction, and organisational commitment. According to Peltier et al. (2006), each variable in the quality of relationship matrix is defined a variation of trust and the "confidence in an exchange of a partner's reliability and integrity. It is the affective emotional state toward a relationship" and "enduring desire to maintain a valued relationship". These variables take place as a result of the interactions that lead to different kinds of behaviour. The relationship needs to be disaggregated with trust and job satisfaction as these are variables which operate at the individual-level and affect organisational commitment at the wider level. This explanation sits in-line with what Ki and Hon

(2009) propose when they discuss the quality of relationships which they bring to apply as a strategy for business administration. The variables of the relationship arose depending on context and the application of these variables, in regards to the relationship between an organisation and public strategy, can be explained through inter-personal relationships. Psychology, psychiatric therapy and marketing relationships are the major frameworks of analysis. To discern the overall picture is the last step of the decision- making process. All parties have to be connected with authority and maintain a level of influence over an organisation. The rate of job satisfaction relates to equity theory. The input and output of the two parties are equal in all relationships as they are supposed to have equal rights. Hon and Grunig (1999) define the term 'job satisfaction' as "the extent to which each party feels favorably toward the other because positive expectations about the relationship are reinforced". The forms that are passed over one another among people and their relationships is strengthened. Trust is a kind of confidence that impact parties in the relationship under the dimensions of integrity, dependability and competence. Trust is applied within the concept of an organisation where honesty and responsibility are the norms. Organisational commitment is considered one kind of social exchange. An organisation also has social responsibilities and must communicate this with the individuals within its structure. Sometimes, the quality of relationships in educational institutions depended on the success of those who monitor the instructors (Ting & Yeh, 2014). This is a common approach.

Other examples can be used to explain the quality of relationships. Saridakis, Lai, Muñoz Torres, and Gourlay (2018) state that job satisfaction and organisational commitment are the variables with different ouputs. They argue that job satisfaction leads to organisational commitment and vice versa. Here, it is argued that job satisfaction leads to organisational commitment, which itself is rooted in the assumption that members in an organisation exhange resources. Attaining organisational objectives and rewards leads to greater job satisfaction. This explanation is significantly influenced by the theory of social exchange. Nothing can change the hearts and the minds of employees in the workplace so entering an organisation has to be done voluntarily. This kind of experience is in-line with

organisational commitment and is considered a sub-reason of why one may decide to work in an organisation.

In an educational context, Snijders et al. (2018) provide an explanation in regards to the relationship between students and employees in the same field. using a framework called relation quality (RQ), which they argue brings about a bond between customers and sustainable organisations. The quality of relationships must be evaluated by two groups of people within different dimensions and situations; within the group that is studied, trust (which is referred to as honesty) is applied to the research. Trust occurs when students believe that employees are sincere and reliable and their performance is effective and trustworthy. In addition, if staff are sufficiently benevolent and seek the utmost benefit and interest of the students, this increases trust. Next, satisfaction is explained as the awareness of students' emotions. Lastly, commitment is defined as an individual's emotional bond to the educational institution. This dimension can also be a negative indicator of quality of relationships. The application of quality of relationship to an organisation seeking profit can be employed to top-level educational institutions. Some similarities can be found between business administration and internal relationships within an organisation. Research on educational administration found that the quality of relationships concept should be employed to educational employees as well as it impacts the academic results of high school students as well. The attitude of the customers, likewise, affects commitment and relationships to academic services. Three variables used in this type of research are; trust, job satisfaction and commitment all briefly discusses below.

2.3.1 Organisational commitment

Buchanan (1974) states that organisational commitment is the result of the connections and formulation of values for members in an organisation, which then give rise to organisational goals and values. Benefit that an organisation is expected to bring to society is also an influencing factor. Here, commitment becomes an internal incentive for individuals as a result of a leader and an organisation as a whole. The relationship is considered multi-dimensional among employers and employees. The commitment of the employees towards an organisation contributes to the indicators that are used to measure performance. If employees have higher level of commitment,

they would have corresponding higher levels of participation and loyalty. This concept of organisation commitment sits in-line with what Harrison and Hubbard (1998) explain when citing the definition provided by R. M. Mowday, Porter, and Steers (1982, p. 27). Organisational commitment is directly related to the attitudes of employees towards an organisation. They must have a unified set of beliefs and be happy to perform the duties expected of them by an organisation. Conceptually, this can be characterized by at least three factors: a) a strong belief in and acceptance of the organization's goals and values; b) a willingness to exert considerable effort on behalf of the organization; and c) a strong desire to maintain membership in the organization.

The concept of organisational development can be categorised into three different phases. According to Becker (1960), in the first phase, commitment is centered on individuals. An organisation must invest in each employee so that he or she is able to work. In turn, the employee develops commitment to an organisation that he or she considers an investment. If an employee resigns, an organisation loses their commitment. It is obvious that commitment impacts the resignation rates. In the second phase, Porter, Steers, Mowday, and Boulian (1974) propose that psychological motivations which persuade an employee to work for an organisation, focusing on attitude, are important. The mentality of the employees is included here as part of an organisation. The third phase is defined as by multi-dimensional approaches. There are two groups of scholars in this area. The first group is O'Reilly and Chatman (1986) who place organisational commitment into three groups. These are, that participation must arise from a tangible object such as money. Participation helps one become part of an organisation in terms of value and mentality. The second group is led by Meyer and Allen (1991) whose description of different types of organisational commitment is widely accepted. They propose three components, including; affective commitment, continuous commitment, and normative commitment. Armstrong (2016) discuss the three characteristics used by R. M. Mowday et al. (1982), applying strategies for human resource management. According to this, organisational commitment is used to persuade employees to devote themselves to an organisation. The members are happy to be part of an organisation and accept its beliefs, values and goals and may become confident in and willing to put their utmost efforts for an

organisation. The type of organisational commitments are presented in the form of psychological ones. Different particularities in an organisation must operate in the same direction, according to Saridakis et al. (2018). Meyer and Allen (1991) explain organisational commitment using three concepts. First, normative commitment, which is the desire to be a part of an organisation's ethical concerns that are agreed before. Second, continuance is the awareness of the costs when one has to quit the job and risks losing everything one has devoted oneself to. Third, affective commitment concerns the way in which each individual displays his or her identity, as connected with an organisation. R. M. Mowday et al. (1982) categorise this connection into two types; attitudinal and behavioural. The two are different in that each individual's participation is quite particular in nature, and depends on an organisation. Here, belief and values are categorised differently. The members of an organisation are pleased to do what is indicated in the regulations and may want to continue their membership. The category of organisational commitment depends on the values specified. The difference, therefore, depends on the level of an employees' duty, which can be altered according to the level of psychological commitment. An organisation may arouse an employees' feelings as the most important driver for loyalty. To work in an organisation for a long time leads to commitment, but depends on contextual changes. Weiherl and Masal (2016) state that affective commitment is a key variable here. Types of commitment can be used to explain emotional attachments, and this may depend on an individual's character. The form of commitment varies according an organisation and the situations. Changes of mission influence the transformation of commitment. New organisational values and objectives focused on output and achievements may arise. Each individual's commitment is different, and will depend on their relations with others, identity and behaviour. Different levels of commitment depend on the overall environment in the workplace. Ennis et al. (2018) employ the ideas of Meyer & Allen (2004) in TCM employee commitment survey academic users guide, elaborating that employee commitment and output depend on an individual's emotional connection with their workplace. This is the result of their own feelings and is not forced upon them by anyone. Normative commitment may impart the feeling that they 'ought to' remain in an organisation. Organisational commitment may continuously evoke the feeling that employees have no choice but to stay. Emotional

commitment is necessary to an organisation. Responses to the improvement of an organisation are also a necessary factor to this, resulting in changes to an individual's attitude. Normative commitment creates more choices for some employees, but not all. However, responsibilities toward an organisation are also those of the individual. Employee behaviour can be influenced by their relationships in wider social settings or an organisation's culture, which is a form of socialisation.

Hulpia et al. (2012) argues that organisational commitment includes the relationship with the educational leader in terms of their identity. This is further related to job satisfaction, internal incentives and the behaviour of organisational citizens. Sometimes, it leads to negative behaviour. When high levels of organisational commitment are present, employees' devotion may be high, too. Hence, they will strive their best to achieve organisational goals, which represented the efficiency of an organisation's system. The relationship between the distribution of functional leadership and organisational commitment is found in the fact it contributes to the build-up of self-efficacy and increases ethical concerns. However, the process is quite complicated because a number of parties take part in the build-up of an organisation. Looking at the division of leadership based on the functional distribution, it is found that supportive leadership positively impacts commitment as instructors are encouraged to move towards to their goals, reducing stress and raising attitudes in the workplace. This is related to leaders at all levels, ranging from the head of the instructors to school directors. Second, monitoring leadership is witnessed when a leader takes part in evaluations and observations of instructors' performance in the classroom. Consequently, feedback in regards to performance and organisational commitment will also take place. If feedback is not from the students, there will not be any clarity about the messages of a leader, and this can possibly negatively affect commitment. Evaluations should ideally come from the director and vice director. Harrison and Hubbard (1998) discuss the concept of general conditions in the private sector and the variables that lead to organisational commitment and job satisfaction. They argue that participation in the decision-making process, age, the leader's behaviour and work-years are important indicators of organisational commitment. Much research employs variables in regard to gender, age, work-years and educational background. Situational variables such as job characteristics, the

organisation, and years of experience should be taken into consideration and means that working performance can turn into other kinds of behaviour depending on the context.

At the core of organisational commitment is the emotion caused by an organisation itself. Employee performance is developed through emotional commitment an employee has to an organisation. Therefore, an organisation should support plans for investment in human resources (Armstrong, 2016; Snijders et al., 2018; Weiherl & Masal, 2016). Different sets of belief and values need time to take hold in employee minds (Buchanan, 1974). Contextual differences contribute to changes in organisational commitments. Many individual factors caused this kind of commitment (Hulpia et al., 2012). Many scholars have conducted researches in this area, primarily asking questions of which methods affect commitment. Whatever organisational behaviour lead to positive performance, it can be considered as beneficial. In addition, organisational commitment leads to other positive behaviour.

2.3.2 Trust

The concept of trust depends on its use in different fields of knowledge. Kramer and Tyler (1996), citing Worchel (1979) about trust and distrust in Austin and Worchel (1979), state that there are three ways in which trust is recognized. First, theorists who pay attention to individual particularities focus on the personalities of individuals, arguing to the importance of particular schemes of development and contextual factors. Trust means belief, expectations and feelings embedded in their personalities. These are the result of the psychological development of each individual. The second group includes sociologists and economists who focus on phenomena within the institution connected with each individual. Third, sociological psychologists focus on the exchange among and between individuals that can either damage or enhance their trust in interpersonal interactions. Here, trust is defined as the risk versus expectation. When contextual factors of trust have benefits to the development of each party and are applied within educational circles, sociological meanings are witnessed. Such analyses find that people can act with awareness of their own decisions and can freely chose whom they trust (Lesinger et al., 2016). This is in-line with Ariyabuddhiphongs and Kahn (2017) who apply the definition of S. L.

Robinson (1996) to explain that trust is an expectation and assumption of other people's behaviour; behaviour which has mutual benefits. If not, it is likewise expected that behaviour will not damage anyone else. In some cases, levels of trust can impact job satisfaction, organisational citizenship, performance and psychological well-being. Top et al. (2015) state that trust is the individual's expectation and faith towards an organisation's commitment. No personal interest is included in this concern.

Zhu and Akhtar (2014) argue that a leader in the process of response and transformation (from the status quo) who is uncertain will tend to be put in a risky situation. The acknowledgement in regard to the risk among the employees can be lessened with two kinds of trust. First, cognition-based trust happens as a result of the rational decision-making process of others. This lessens the ambiguity of the work among the employees. This is another kind of relationship that supports the financial and economic conditions of an organisation. Second, effect-based trust results from socio-emotional conditions and confidence of social relationships. Feelings of commitment and relationships, in terms of social exchanges and friendship within an organisation, will be valued here. Trust arises directly from expectations of what they will give and receive. This is in-line with the category of trust among employees as defined by Kramer and Tyler (1996) who state that trust is relate to behaviour and the belief that people will do as they say and fear negative results if they are not able to keep their word. This assumption is rooted in the theory of deterrence which asserts that trust is sustainable if when behaviour is obvious and predictable. Conversely, punishment will occur, if anyone breaks the rules. Punishment is effective and perceived as a form of disincentive. However, sometimes, certain types of rewards can be more effective. The creation of this kind of trust depends on the value of benefits and capital. If rewards come from cheating or questionable behaviour, the latter would be more effective if the punishment is harsh enough; employees will be scared to be punished. Knowledge-based trust is founded on estimation and expectations, meaning that one has to have enough information of what will happen next. Trust, therefore, significantly depends on the knowledge and information at hand. This kind of trust occurs as a result of expectations based on experience and interactions. Therefore, mutual trust is expected. Another dimension of the equation is

that each individual must trust and be willing to learn from one another. Estimations contributing to improvements in trust, even though the other party may not be trustworthy, means that willingness to break the agreement can be foreseen. Accuracy in regards to estimations of trust can be achieved in many dimensions of interactions. Identification-based trust is described as the willingness to explain the expectations and willingness of others. Trust is possible because the group understands and recognises the needs of others. This understanding leads to more effective performance in the interaction. This type of trust is connected to different members of the group as goals are developed at the individual level which are then upgraded to the group and organisation level. Therefore, everybody understands the benefits they can expect and has to protect every party in an organisation. Trust, in terms of identity, is possible with the group that is at work. This type of trust is based on interactions. The knowledge and understanding of policy implementation is sustainable because of trust. This is defined as the second-order of needs that really matter in an organisation. The performance outcome is foreseeable because employees always put themselves in their colleagues' shoes, meaning knowledge-based trust is developed and transformed into identification-based trust.

The methods to apply trust in an organisation are crucial. Gomibuchi (2004) states that trust is accepted among both leaders and the followers. The definition of belief is psychological emotion, which is vulnerable to positive direction and expected behaviour from others. It must be understood that the relationship between those who trust and those who are trusted is not a stable exchange. There are three steps of trust formulation. First, building the process which creates, adds value and restructures trust so that it is more stable. Mutual trust is witnessed in this stage. Second, the process of dissolution refers to when levels of trust decrease and disappear. Accordingly, trust is not fixed and thus no standard can be used to measure it. Trust is not essential. What can be known and recognised about trust is that it comes about as a result of cooperation and frequent communication. The level of trust among leaders and followers is different, although sometimes happens in the same context. However, at other times, trust and scepticism occur as a result of the task, situations and persons involved. Rousseau, Sitkin, Burt, and Camerer (1998) speculate that that calculus-based trust is formulated from rational-choice. That is, there are the regulations that

prohibit economic exchanges and those who trust others are monitored by external actors. This kind of rational trust is underpinned by behavioural interactions that are repeated over time. In order for confidence towards an organisation to be achieved, so the employees be attracted, both kinds of relationships must be sustained in different ways. However, the former can be less sustainable. Three kinds of trust awareness exist; first, ability-based personal capabilities, which have a positive influence based on the situation. Second, benevolence and good-will, and third, integrity, or the willingness to walk in the same direction of an organisation. When it is put into practice, only one or two aspects may be implemented, and possibly, none, depending on the situation.

According to Northfield (2014), the assumption of trust-development among educational leaders is adapted from four types of trust. MacMillan, Money, Downing, and Hillenbrand (2005)state that trust is initiated by the director of the educational institutions in relationship to what is expected by employees. The director's behaviour therefore should be in-line with the roles based on laws, policies and regulations set out by human resources. Management is in-line with duties and trusted practices. If a director's behaviour is responsive to their employees' expectations, it can lead to integrative trust. The director's interpretation of the situation may be more accurate and hence enhance relationships and beliefs within an organisation. Employees are aware of the directors aims and will put these into practice and accept them, with an understanding of what is appropriate. This leads to correlative trust, as a key variable that enables employees to understand and share values and beliefs with the director. This will lead to employees performing their best, with respect and support from other employees in an organisation. According to S. L. Robinson (1996), who tested the materialisation of psychological promise in the workplace, observed that without it, employees lost trust and experienced negative emotion which affected situational satisfaction and became embedded in each individual's memory. What is important is that an organisation trusts its employees and vice versa. This reciprocity is a kind of psychological promise that helps foster information, trust and attitudes in one another.

Moreover, the role of trust can occur in a number of forms of interactions – be it individual or institution. Cho and Park (2011) categorised the origin of trust into three types. First, it is trust in management which included policy, procedures and

approaches. The approach in institutional interactions is more focused as it led to an organisational commitment, loyalty and produced its images. Next, trust in supervisor is the situation in which a medium-level manager performed as a mediator in a conversation between the top and the bottom line of policy practitioners. This can be compared with what is indicated in leader-member exchange theory (LMX). Trust is important between a leader and the followers. The latter would have good attitudes in the workplace and the outputs are produced as what a leader and an organisation expected. In addition, trust in co-worker is the belief that the environment in the workplace would enhance the performance of the employees. There is cooperation to solve problems, support one another and initiate incentives in the workplace. The sharing of information in the group enhanced the work performance. The level of job satisfaction and organisational commitment would also be higher. Trust in the actual interactions among individuals occurs due to the belief in a leader and ones' colleagues. In terms of management, trust is considered an institutional property; this is described as 'vertical trust' as its direction is compared with a top to below line, following the chain of command. A leader can look for rewards and offer them to the followers; medium-level leader has limited authority but the relationship is still considered vertical. This concept is most concerned with job satisfaction and organisational commitment. If communication procedures, in regard to a leader's trust, perform better than institutional ones, it is considered as 'natural trust'. Trust in a leader is considered as part of a direct line of interaction, connected with organisational regulations among employees.

In conclusion, the psychological behaviour of each individual depends on the expected exchanges from different parties. Symmetrical exchanges are not be possible, but when both parties agree, they can engage in psychological exchanges (Ariyabuddhiphongs & Kahn, 2017; S. L. Robinson, 1996). The assumption of exchange is that in the relationship, one should not allow anybody to exploit others (Top et al., 2015). Trust lessens the risk of the damages caused by changes because of the feeling of trust, which supports both parties. In an organisation, trust should be relevant to the relationship, which occurs through arranging a set of regulations for employees where they become aware of their roles and the guidelines of practice. This leads to the development of trust in a group (Northfield, 2014). There are no clear

regulations of trust as it is very contextual. However, there are psychological consequences when a promise is broken. There is no such experience in a bigger group and nothing can damage its identity. However, trust can damage certain individuals and there are punishments from an organisation, as a community, which often establish such practices according to international traditions and culture (Kramer & Tyler, 1996). The role of trust can be categorised in many levels with different practices such as with (and for) administrators with employees, employees with another employee, or an organisation with the employees. The output of trust thus depends on different types of administration (Cho & Park, 2011).

2.3.3 Job satisfaction

Job satisfaction is essentially an individual's response towards the tasks they are assigned to perform (Locke, 1976 cited in Gruneberg (1979). Aldas-Manzano et al. (2011) citing Locke (1976, p.1300) state that job satisfaction is defined as "a pleasurable or positive emotional state resulting from the appraisal of one's job". Moreover, contextually speaking, Oliver and Swan (1989) states that it is a psychological step with emotional impacts upon a situation that lacks a conformation of what one expected one would have. Based on one's experience, it would be compared with the expected benefit; that is how customers judge a relationship with an entrepreneur.

Job satisfaction comes from the evaluation of a task, job, and/or project (Boer et al., 2016). According to Oliver and Swan (1989) as cited in Rojas-Méndez et al. (2009), job satisfaction is a response to the evaluation, attitudes, emotions, and feelings of each individual. It can therefore be used with not only products and services, but an organisation's physical facilitation and interactions with its employees. Moreover, job satisfaction is built on the foundation of trust which is in-line with the definition by Muterera et al. (2018). Emotions are connected to one's job description and the environment in the work place. Employees seek rewards to fulfill their emotions and cause satisfaction. Sometimes, dismay and dissatisfaction can be witnessed. Therefore, satisfaction is one type of positive emotional expression that can occur as a result of an evaluation. According to the experiences of each individual when one's tasks are assigned, most successful organisations are focused on employee

satisfaction. This is in-line with the research of Dutta and Sahney (2016) who explain that an instructors' satisfaction is mainly focused on the tasks they are assigned as their behaviour is influenced by those jobs. The factors that support the quality of the job assigned by their instructional leader can be tangible (rewards in terms of money etc.) and intangible (conditions for their job, and authority granted in the workplace etc.). The job satisfaction of instructors would thus be connected to their authority to control the classroom and support from the director and the educational institution. What affects students' success would likewise be the instructors' job satisfaction (Nazim, Mikail, & Engin, 2016).

Job satisfaction has three components, as suggested by Noe et al. (2014). Job satisfaction is different because different people have different perceptions in terms of values, norms and points of view. An organisation can make its employees satisfied according to job disposition, job tasks and roles, their supervisor, co-workers, and the pay and benefits. Therefore, job satisfaction is linked to the components of personal value.

Different employee has different perceptions and which impact their values and perceptions. Levels of satisfaction are therefore different, because the basic assumptions which form it are different. However, there are no perfect measurements or clear objectives related to job satisfaction. Perception depends significantly on the situation and the individual who compares the jobs with their values and the perception of others. According to J. J. Campbell, Dunnette, Lawler, and Weick (1970) and Gruneberg (1979, pp. 9-26), 'content theory' can be used to explain how situations impact job satisfaction. The 'needs theory' of Maslow (1943) is also applicable in explaining the hierarchy of desires that cause employees to be satisfied and jobs to be completed as expected. Nevertheless, the drawbacks of this theory are pointed out by Locke (1976), who states that this is part of a natural desire for human beings and not a necessity for life. He explains that each individual's incentives are different. Some might not have high levels of desire, as explained in the theory. Next, Herzberg's two factor theory asserts that job satisfaction is bought about in two main ways. The first is the motivator that leads to job satisfaction; but this is not absolute. Also, there is a hygiene factor that leads to basic satisfaction. When levels of this factor are not high enough, it can lead to job dissatisfaction. If it is enough, it will lead

to job satisfaction. However, this theory has a central drawback as well. The motivator did not always lead to the highest stage of desire that one wants to improve oneself and be successful. Sometimes, incentives that can lead to satisfaction which are not surveyed. In regards to hygiene, it lacks any psychological perspective because it is over-focused on eliminating undesirable characteristics. If working conditions in the place are not good, changes may also not be good, either. Moreover, process theories discuss needs, values, and expectations of individuals with their job as key factors to job satisfaction. Working environments are a key unit of analysis in regard to the presentation of the workplace and an individual's expectations.

Individual needs and values are examined by using these following theories. First, expectation and equity theory focus on employees' satisfaction with something when they try to place their effort in a particular job, such as stipends and rewards. If employees receive less than what they expected compared to how much effort they put into the work, this can negatively impact their performance. Second, reference group theory is inherited from expectation and equity theory. It prime concern is how the understanding of the individuals involved in the relationship impacts job satisfaction. An individual's expectations become the supplementary part of personal information and needs and then become the personal values considered to be a part of job satisfaction. Third, needs/values fulfillment theory concerns how a job is valued based on personal differences which impact job satisfaction. Vroom (1964) categorised values concepts into two types. The subtractive model looks at satisfaction in regard to negative relationships with the difference between individual's desire and the scope of the tasks assigned. It asserts the more needs one has, the less satisfied one will be. If there is cooperation, higher job satisfaction can be expected without having to consider the particular needs of each individual. Next, the multiplicative model is about the desire to enable each individual to set up common standards in the workplace. It implies that it is difficult to clarify what an individual want and how much they want something.

Satisfaction has, as its main essence, the experience from work that leads to positive and negative emotions and attitudes. Each employee expects benefits and something back from their work place. It does not matter if the expectations are high or low; job satisfaction concepts can be applied within many contexts. The

components of satisfaction imply it is something that an organisation can give to its employees. For example, through stipends, welfare and job descriptions that benefit the employees. There are quite a few fundamental theories in regard to job satisfaction. For example, this section dicusses content theory, Herzber's two factor theory and process theory. Theoretical frameworks in regard to these theories help fulfill the gap at the work place and the expectations of employees from an organisation. Job satisfaction is generally considered a reciprocal response. Job satisfaction is the interaction between the experience of the past and present; although the interaction between employees and the organisation will continue to happen, even if there is no change. The general environment and the nature of individual in the workplace impact general behaviour.

2.4   Literature on the need for satisfaction: self-determination theory:

Self-determination theory (SDT) discusses the relationship between demand and supply in regards to a job and its resources, using employee needs and the impact on their behaviour of satisfaction, including factors such as burnout and engagement. The explanation of Van den Broeck et al. (2008) indicates that SDT is akin to psychological persuasion it the workplace. An organisation carries the basic expectations of achievements of goals, affiliation and power. However, for some kinds of needs, there may be limitations, such as self-actualization and social recognition. The characteristics of SDT focus more on the individual's experience than needs. In this, the key factors that lead to satisfaction depend on incentives, well-being and performance according to individual goals; ABC: autonomy, belongingness and competence. The theory can be applied to a number of circles. It means that psychological needs depend on the fundamental assumption that individuals can normally not work. There has to be some kind of mediator, which in this case are satisfaction and needs, that help propel employee performance, according to self-determination theory. Indeed, the theory has the basic assumption of the internal decisions by each individual on the ways in which one can be developed. This theory can be combined with self-concordance theory (Kovjanic et al., 2012); a theory which attempts to explain what happens inside the mind of each individual and how this relates to interactions with others. The research of J. G. La Guardia, Ryan, Couchman,

and Deci (2000) indicates that different kinds of needs have particular and different responses which are emotionally unique. For example, needs have responses are emotionally sincere. Responses are rather stable in relationships and exchanges, as they are part of the need for autonomy, a need which occurs when feelings of insecurity nestled within the emotional commitment of each party occur. To establish a relationship with the parties that criticize an individual's output or performance, thus becomes difficult.

The recognition of emotional commitment depends on the needs of the relativeness and autonomy. An understanding of these kinds of needs also depends upon a rational interpretation of those who respond to the situation and the mediator's level of experience to facilitate the organisation's well-being. This sort of well-being is considered part of the basic needs of an individual. Therefore, needs as indicated by self-determination theory, become the mediating variable between the stability of emotional commitment and well-being. The relationships are depending on the model used to asses it. Self-determination theory tries to explain employee needs in an organisation so that the right methods to persuade them to do something occur. However, the outputs of implementation can be also various because particular behaviour is caused by different contextual factors. Deci et al. (2001) argue that self-determination theory is defined as the analysis of general psychology and examines human incentives and psychological experiences that can make up feelings of well-being in an organisation.

A variety of outputs depend on the internal culture of an organisation. Needs and satisfaction are presented from the angle of working procedures and psychological adaption that includes support from leadership. This leads to freedom in the workplace and the development of trends that meet individual differences. The fact that an organisation has to adapt its expectations in regard to the needs of capabilities, autonomy and working relationships is an attempt (for an organisation) to achieve its goals. Support from a leadership to offer freedom provides opportunity of access to information, options and initiatives of self-initiation. leading employees to trust a leader and become more satisfied with their jobs. This will also lead to higher happiness and loyalty to an organisation, causing others to be more satisfied with their behaviour in the workplace. Such feelings would lead to an avoidance of being absent

from work and higher overall satisfaction. Moreover, other mechanisms that persuade employees to be free and are connected are necessary, with the control of incentives and expectations part of creating a satisfactory experience. These mechanisms support the development of a social environment – more than organisational behaviour – which influence other external factors. The need for satisfaction can be found in every organisation because the efficiency and well-being of the employees are fundamentally connected. The two parts form the basic definition of 'needs' according to SDT. Deci and Ryan (2000) present the concept of needs and use other theoretical frameworks to support it. SDT focuses on incentives and their psychological responses. These have impacts on behaviour and mental conditions, depending on an individual's goal and the social contexts. Support has causal relations with the growth of incentives, both internally and externally. This includes performances and well-being in an organisation. This theory differs from goal-directed behaviour-based theories. The regulatory process is also different, leading to a different path to achieve goals, behavioural estimation, and expectations, as psychological needs are the basic foundation that lead to output values. All of the factors mentioned above are explained by the concept of needs.

To review the literature on the theory of needs, two scholars need to be mentioned. First, Hull (1943), who talked about the main types of behaviour that can be employed to explain the basic needs (food, drinks, sexual relationships, etc.), but also focuses on environmental conditions and other drives not included in the neurotic systems of human beings. These take place in response to the needs of satisfaction. If the results are not satisfying, people will be less driven, according to 'drive theory'. The theory asserts that psychological drive is connected to incentives and expectations rooted in an individual's sub-consciousness. This is particularly connected to psychological needs. However, the behaviour of skepticism and the willingness to dominate others can still not be explained by the theory. Details with regard to the drive which makes an individual enthusiastic are also still missing. Sometimes, psychological drives function less and people thus become less active in taking part in their daily activities; this that is not explained either. Murray (1938) tries to provide an explanation in regard to needs in the workplace and to identify psychological needs from their origin rather than focusing solely on level and

location. How the brain functions (cognition, perceptions, emotional quotient, mental conditions) and the behaviour that transforms desires into action in undesirable situation are not described. Self-degradation, acquisitiveness (greed) and domination are the origins of each individual's motivation as they fit into the kind of task they are assigned. This is a reflection of society and dynamic changes in terms of personal needs. The SDT framework indicates that needs influence psychological growth, integrity and well-being and is due to both appropriate and inappropriate factors, as the origins of needs can be numerous. Because of their needs, human beings look for whatever can satisfy them. It can be the result of a proficiency relationship where needs arise if there is no obstacle or indifference towards the action. Satisfaction must be appropriate to, and depended on, the individual's values. Psychological health must include three factors; autonomy, relatedness and competence. It is not only one single need or two. The mechanisms chosen by human beings design a way of transformation so that commitment in the activities they engage with are possible. These three kinds of needs are buried deep in a person's thinking, according to the structures for success and in regards to the concepts of effectiveness, connectedness and coherence. The perspective of the SDT is that achieving goals, setting up the scope of knowledge and bringing about relationships supports satisfaction based on positive psychological experiences.

Deci and Ryan (2000) explain further that SDT includes key components not only found in human beings. There is also the process of learning, inter-personal interactions, and the best strategies to cope with physical, environmental and social conditions. There is a newly-founded theory that talks about the mechanisms of organism-dialectical paradigms to help understand when a psychological state lacks balance. This kicks off when the mechanism of peace is disturbed and is propelled into action when balance must be reasserted. These psychological systems of human beings are categorised as passive as is the responses of satisfaction. A person's cognitive perception in the decision-making process is the identification of the activities towards the trend of growth, environmental management (both internally and externally) and bringing about coherence within the self and towards others. The key aspects of this are aimed at understanding the contextual awareness factors that lead to the satisfaction of needs. Therefore, the ability, procedure of value, social

connections and increases in psychological differences all affect the direction of an individual's behaviour. Here, however, performance in the workplace is excluded. To understand satisfaction is necessary because human beings are lonely. They need to find companion and relationships. When human beings are forced to do something, they will express the willingness for autonomy. Also, when human beings feel they are not effective, they will try to improve themselves so that they can achieve their goals in the workplace. Work, therefore, requires competence. When one has enough experience, one will be satisfied. It means human beings must be happy with the activities and interested enough in responding to their experience in the long-run; this is a self-organising process and considered a kind of self-challenge at work. A person's devotion to meeting their psychological needs cannot be overlooked because psychological needs can obstruct those who do not adapt themselves and will slow their attempts for self-improvement. Psychological needs have a fundamental function; to define the kind of persuasion that are supplementary to a person's interest and the procedure of maintaining certain kinds of behaviour. The supplementary drive should not dominate their behaviour. When certain external persuasion is combined with self-regulation, the understanding of human being towards their social environmental is considered internalization. There are steps of intervention or transformation with regards to the acceptance of values of an individual and self-control by identifying social control. These steps are external regulation, introjection, identification and integration and can bring about effective needs management of an individual towards their environment. Moreover, when an individual face with demotivation, they are considered lack necessary incentives or recognition.

Van den Broeck et al. (2008) identify three dimensions of needs contained within self-determination theory. First, the need for autonomy, which is related to one's experience and volition. This leads to personal choices that are supported by external factors. Rationality is employed by an individual to deal with requests for help and to learn about the feelings of others. If requests are supported, it is considered as a voluntary action and one would have the utmost freedom to continue to pursue their desires. This is because the decision is accepted, even though it originates from others and an external environment. The definition of the term 'needs for autonomy' therefore differs from other general definitions which refer to personal

matters. However, it is still concerned with personal judgement, which is independent of external influences. Second, the need for belongingness or relatedness is what makes human beings connected to one another so they can take part in relationships and experience success. This definition can be applied to look at teamwork at an organisation-level. In other words, to work together is a condition that battles isolation and a lack of confidence in the workplace. Third, is the need for competence, which is the ability to control the environment and expected outputs and to deal with various kinds of challenges. Internal factors have a particular dimension that employ a person's feelings to support themselves. This is in-line with what J. G. La Guardia et al. (2000, p. 368) write, who state that "sensitivity or responsiveness has been differentiated with respect to the three psychological needs for autonomy, competence, and relatedness". The theory can be detailed as follows. Autonomy is the awareness that people will do what they desire; this is called volition or agency. Also, when one wants to start doing something, it is described as initiative. The overall picture that is drawn in one's mind is to support self-initiation and put idea into practices. The next dimension described is competence, which refers to the feeling that people are always curious. Both challenges and efficacy lead one towards success in the workplace as well as self-confidence. This last dimension is defined as relatedness which bridges individuals together with care and sympathy. This is a part of natural goodwill that drives individuals to achieve their goals. Therefore, psychological needs and self-adaptation lead one to advantageous benefits. According to the basic assumptions of SDT, one needs appropriate experience to bring about an effective society. This also influences emotional security and self-management in-line with assigned jobs. For example, the first need for competence is to transform learning mechanisms so that the individual can face challenges in a new context. The continuation of learning leads to the development particular skills in each field. The employee can improve themselves until they became successful. This kind of need is the model of activities that persuade the internal drive of an individual, give rise to cognitive perceptions and propel an individual's ability forwards. It also boosts the growth of the society; the benefit is obviously the interaction between societies with different kinds of participation and the ability of the individuals involved. As they cooperate, the indicated direction towards success is upgraded and is hence clarified,

to all members of the group. Second, the need for relationships is about how the behaviour of those on the top of the society and social development are imitated by other individuals. As these individual imitations are expanded, people are more similar to one another. Humans relationships are an important component that forms social structures at a profound level.

The relationship continues to increase and anyone who enters a group is placed under pressure as they are filtered and scanned to be part of society. The scope to take care of and defend those who succeed in social relationships includes responses to the needs of the members and values where there is cooperation for activities. Particular benefits of each labour group also have to be taken care of. This is one method to transform values of resources that can be shared with one another and the protection of common benefits. Third, the need for autonomy is about self-management. All living things attempt to manage themselves and this management must be in-line with their behavioral objectives so that they can survive. The freedom of human beings at the phenomenal level can be reflected with the experience of integrity, volition and vitality. A structural explanation in regard to human freewill is not wrong because, according to the mechanism of living, the cause of widespread phenomena needs to be recognized. This mechanism pushes individuals to transform themselves. The most important factor here is effective self-to maintain cooperation at the first step of all procedures (Deci & Ryan, 2000).

Different angles of the need for satisfaction impact employee behaviour. According to a literature review, what is mostly found is that satisfaction is the mediating variable that affects other dependent variables. Chiniara and Bentein (2016) employ the concept of leadership which focuses on followers' behaviour. In an organisations, needs are explained using SDT. Some literature employs the concept of a servant leader which focuses on the growth and well-being of an organisation. The focus also covers the search for outputs by using mediating variables, such as the need for autonomy, competence and relationships. This is conducted for an organisation's performance and organisational citizenship behaviour (OCBs). The details of the output are about the satisfaction of sovereignty that impact performance and the OCB both at the individual and organisational level. The need for satisfaction and competence only impacts performance. However, the satisfaction of the

relationship has impacts both levels. Leadership should be tested by the decision-making procedures to understand all the three types of needs so that positive behaviour is produced. Most likely, trust will occur concurrently with the needs for relationships because of the regulations that benefit others, known as altruistic leaders. The servant leaders know that well-being is necessary for followers. Therefore, a dyadic relationship takes place. Followers feel safe with this kind of leader; a leader who uses these types of needs is concerned with the relationships within the group, organisation and community. To fulfill behavioural outputs depends on two kinds of contexts. The first one is the dyadic context, in which the mechanism of the exchange in relation to the need of satisfaction, makes trust possible. The individual would persuade other parties to trust him or her in the same manner. Second, the social organisational context creates emotions that connect more people. This trust is an important drive which helps members of an organisation. This becomes the OCB-I and the major concern is the benefit to an organisation benefit; OCBO-O.

The need for satisfaction is an incentive for self-improvement. It can make the persons involved in the exchange of experiences in a society satisfied. A case study from the research of Chen and Adesope (2016) which cites enrolment in an online English class with the aim to sit in the national examinations in Taiwan is cited as an example, indicating that satisfaction responds to another set of behaviour. The study finds that from the three kinds of satisfaction, the need for competence is most sought after by the students. The need for relativeness and autonomy then follows. Students and instructors are influential in bringing about incentives for their own decisions. These become psychological growth and well-being. Each individual's needs have different supporting reasons. The need for autonomy can be employed to explain self-initiation and self-regulation. The reason can be that when one is forced to learn something because of an academic programme or is forced by the instructor, the level of satisfaction decreases. The fact that a student can control the online course more than in the classroom thus impacts their satisfaction towards the academic programme and the self-commitment of the students as well. Next, the need for competence is about the interactions with the environment and the response to the exercise of skill when an individual has to face numerous challenges. To enroll in the online course,

one has to use the language and information skills. If the student is aware of their own competence, they will be careful in the class. This certainly impacts attitudes towards an academic programme because it is considered a self-incentive and needs relationships. If students are stable and satisfied, they can more easily relate to other people in the learning community. When everyone takes care of everyone else, the sharing of knowledge can be witnessed and academic goals are achieved. The commitment of students is possible if grades are positive. The needs satisfaction, therefore influences cognitive perceptions of autonomy that can allow for the estimation of one's internal incentives. The reason, in regard to the need for competence, is most influential because with this, one can understand the demand to learn in an environment where it is necessary to exercise such skills. Those who learn are able to better prepare and control their capabilities with regards to information. The need for a relationship is followed as technology facilitates communication among people. The relationship is enriched because students will become more interested in the class. The need for autonomy helps provide room for flexibility when the classes are operated. Moreover, students are quite independent from the environment in the class. Kovjanic et al. (2012) propose that the need for relationship exist because of the impact on an organisation and job satisfaction. From other angles, there is no influence on the relationship with a leader because emotional commitment is mainly concerned with the individual. To take care of an employees' well-being affects the devotion to their work. Similarly, it fulfills social needs, in terms of emotions and the desire to be recognized by a leader and the members of society. To establish relationships is thus necessary to organisational development.

The needs satisfaction, based on SDT, centres on when administrators of an educational institution try to look for an incentive to, and understand the needs of, their employees. This need is not fundamental, but rather psychological, and can lead many positive behaviours, such as satisfaction, requests for holidays, and well-being in an organisation. Different forms of needs have particular responses. The emotional uniqueness of individuals differs. There are three kinds of needs; first, the need for autonomy. An organisation grants the authority and freedom to employees for their own self-management, but they are still monitored by regulations employees must take into account. The need for relationships is not the same as the emotional

fulfillment of the group members. However, it is a supplement of energy and confidence within the work group. It also unifies the decision-making process that leads towards the attainment of common goals. Meanwhile, the need for competence is how individuals try to respond to one's own objectives or cope with an organisation's challenges. This kind of need leads to employee self-improvement. Resources should be properly distributed so that the needs for organisation and its members can be estimated. Therefore, expected outcomes can be achieved. The need for satisfaction is a method of incentives that administrators should be aware of when planning an organisations path towards its goals.

2.5   Literature on the concept of loyalty

Loyalty is considered a psychological promise which occurs as a consequence of cognitive perception and the relationship among individuals or groups. Meyer and Allen (1991, p. 67) cited the definition of Hart and Thompson (2007) conclude that it is a kind of relationship between employees and an organisation. It is also concerned with intentions, in regard to the continuous and discontinuous decision-making process of an organisation's members. This is in-line with what Rojas-Méndez et al. (2009), who summise that loyalty is based on the assumption of organisational commitment and is centrally about employees' devotion, the learning process, emotions, state of mind and customer behaviour. In the educational context, to keep employees in theoganisation is less costly than to look for the new ones because more capital is necessary for recruitment. More loyalty is also expected after student graduate and this can support the reputation of the educational institution..

Hart and Thompson (2007) dicuss the differences of commitment as an optional paradgim. They argue athat each individual decides whether to commit to an organisation or not, depending on both rational and emotional analysese. Loyalty they argue, is a normative relationship related to one's duties. However, it must be noted that numerous researchers prefer to employ the concept of commitment because it is not a unidirectional construct variable. Loyalty, however, takes place based on the common benefits of the relationship. It can also be concluded that commitment is the factor to loyalty. Three components of organisational commitment are affective,

continuance and normative. Loyalty is defined as the attitude between groups that can fulfill the expecations of others. This represents active relationships of both groups and is related to self-sacrifice when faced with multiple options. Self-sacrifice can be defined as a situation whereby one has to carry a burden upon one's shoulders. Therefore, loyalty has the characteristics of a psychological contract from the relationship as expected by the employees, towards the formal contract. This leads to the creations of a more creative organisation. For example, transactional loyalty is about economic exchanges among individuals and an organisation. Justice and wages in the workplace are taken seriously. Next, the concept of relational loyalty is the variable concerned with the expectations of each individual and is linked to the currency of socio-exchange. It is a relationship transferred between two parties who have the same kind of relationships with an organisation who aim to maintain and fortify individual relationships and establish trust and allegiance between the stakeholders, under all circumstances. This kind of relationship partially overlooks personal benefits and looks for employers' which leads to behaviour considered organisational citizenship. Lastly, it is about ideological loyalty which is considered the way to the inner mechanics of an organisational. Ideological loyalty is categorised into two types; first, symmetrical loyalty focuses on the recognition of a reciprocal relationship that is formulated through an agreement. This feeling can be both positive and negative. Asymmetrical loyalty is an agreement that does not function in only one direction. Employees may feel that they are rewarded less than they should be. This asymmetry results in feelings of inequity in the work place. Therefore, inequity in terms of rewards, is seen. When one does not receive what one should, it is considered a form of transactional asymmetry. This can be compared with a situation in which employees who devote themselves to an organisation, but got nothing in return, feel an organisation is callous. This is because the relationship does not adere to expectations. This is defined as a relational asymmetry. The most difficult form of asymmetry is that of ideological asymetry, which depends on the context of an organisation's profession.The perception of an organisation's leader is different and can be described as hypocritical and inconstant, even though they may not intend to be like that. This is when idiosyncratic loyalty and individuality is substantially high.

With these two definitions, implementation needs to be re-considered because loyalty is concerned with organisational ethics that formulates relational agreements.

Aldas-Manzano et al. (2011) explain that the steps of loyalty that are related to commitment that leads to situational repetition. This can lead to certain kinds of behavioural change. For example, cognitive function can lead to feelings of affection and thus form certain kinds of action. There are two kinds of loyalty; attitudes and behaviour. Because loyalty has a concealed character that affects attitudes responsible to motivate a person to repeat doing something, it gradually affects behaviour, later. Loyalty that is concealed is influential to situational factors and social norms. Therefore, latent loyalty needs to be protected and loyalty needs to be supported so that loyalty conforms to repeated behaviour. When comparing this to the educational context, the desire to have the same internal behaviors repeated originates from organisational commitment.

Certain pieces of research present the dfferent types of loyalty that exist through a leader or administrator at individual level. Jiang and Cheng (2008) for example, argue that there are two kinds of loyalty. First, affect-based loyalty, which is the emotional binding related to an organisation through a leader. In this form of loyalty, the followers have positive feelings when they evaluate their leader's norms by considering their behaviourand ethics if a leader provides the emotional support to the followers. For example, there would be trust, organisational commitment and positive interactions with individuals in the workplace. This can be related to the theory of social-exchange. It explains that the recognition of a leader's support impacts the level of loyalty. The outcome of a leader's effort, therefore can be found in the followers' attitudes and the situations can be defined as the supervisory satisfaction, intention to leave, organisation performance and organisation citizenship. Indeed, outcomes can be categorised into two groups. The first concerns work performance. Here, behavioural citizenship in the orgnisation is considered a performance-based outcomes. The satisfaction and desire to remain in an organisation is the attitudinal-based outcome. Second, role-based loyalty is rooted in acceptance built as a result of commitment and social roles as a job-leader. This kind of loyalty is related to the expectations of certain roles that fulfill a leader's performance but can be reflected in the attitudes of the employees as well. If a leader treats their followers

well, loyalty can be witnessed and is considered the kind of relationship connected with the leader's actions. Employees will still perform according to expectation rather than just following a leader's commands, which would be considered an over-commitment towards a particular person. This is in-line with loyalty as conceptualised by Ting and Yeh (2014) who use the concept of commitment as a key component of customer relations when they return to buy a product again or when they became a supporter of a brand. Ting and Yeh (2014) categorise this kind of loyalty into two types. First, behavioural loyalty concerns the motivationof the customers to return to purchase products. Second, attitudinal loyalty is concerned with the level of psychological commitment and support of a customer's attitude. Customers are compared with the instructors at school; they can have loyalty but it is contextual. Mostly, the repetition of behaviour is where expected and desirable behaviour is focused on. Loyalty, here, is based on commitment and the form of the relationship. Exchanges occur as agreed upon by the parties. Benefits to the parties are also a key concern. In conclusion, what marks the difference between loyalty and commitment is he level of profoundity of the relationship. Loyalty is centrally about behaiour that is developed from and through many angles of an individual's emotions.

2.6 Relationships among transformational leadership and relationship quality

2.6.1 The relationship between the transformational leader and organisational commitment

Kenneth Leithwood and Jantzi (2005) discuss how dependent variables, moderator variables and intervening variables of transformational leaders drive the students to success. Their research further investigates how organisational commitment at educational institutions takes place. The moderator variable here is the culture at the school or institution that bounds employees the school or institute and thus causes job satisfaction. Transformational leadership is accordingly conceptualised when employees engage with an organisation and are persuaded by a high level of incentives and morality. This is considered as organisational

commitment according to the concept of incentives for transformation and a shared vision. Different people cooperate and build up a sense of belonging through the practices of a leader as the mediator in the communication. A leader must be reliable and participate in the educational community. This is in-line with the research of Kenneth Leithwood and Jantzi (1999) who state that the concept – and practice – of transformational leadership paves the way towards for self-improvement and causes organisational commitment. Eventually, this leads to the output of organisational transformation. Here, the objectives of each variable differ. For example, the transformational leader at an educational institution impacts their internal employees leading to behavioral change in the workplace and increased commitment of the students as important outcomes. Therefore, transformational leadership is made up of independent variables with indirect impacts on the conditions at the educational institution. It informs the relationship of a leader formulated from the common influence of an organisation rather than from each individuals' performances and roles.

The indirect impacts of the transformational leader on employee behaviour at organisations is discussed by a number of authors. Han, Seo, Li, and Yoon (2016), for example, argue that the procedures leaders choose to implement are important to persuading employees to perform at their best and become concerned with group interests above more narrow personal interests. The transformational leader, therefore, is active within the role as if he or she is a mentor to their followers. This type of leader supports the individuals' self-improvement so that they can perform better.

This kind of leadership is a propeller of an organisation towards success. Performance outcomes, organisational culture and systems are very creative. Therefore, followers have trust, job satisfaction, incentives, an organisational and job commitment as major factors. Therefore, the forms of relationships mentioned above are both direct and indirect influences and can even be considered as mediating variables that lead to a number of behavioral outputs. For instance, there can be indirect knowledge sharing and organisational commitment. Employees empowered to test the path of knowledge sharing with a company from South Korea lead to increased employee devotion and the development of pro-social perspectives. Employee incentives and attitudes at work became more positive in the mechanism of

knowledge sharing, empowerment and organisational commitment. Transformational leadership is a catalyst to individual behaviour that can be uplifted to the level of an organisation. Everyone wants to share one's knowledge according to the research of Gkolia, Koustelios, and Belias (2018). The concept of transformational leadership is tested if the self-efficacy of the instructors impacts student commitment and educational strategies. This is employed to look for the relationship between dependent variables and the behaviour of the instructors as well as students. In their research, transformational leadership was a key factor and more influential than other factors. Transformational leadership helps increase the abilities of the instructors, as a form of both centralisation and decentralisation. To elaborate more, Jantzi and Leithwood (1996) employ a traditional model to study this matter studying the variable of behaviour, fostering commitment, the provision of individual support and the holding of high-performance expectations. Their research found that the solution is to allow the government sector to control the director's performance. Transformational leadership, therefore, is a factor that leads to student commitment towards better pedagogy, increased confidence in building academic strategies and discipline management in the class.

The research of Srithongrung (2011) is a path analysis on the mediating variables of organisational commitment and the effects on employee efficiency. The research looks at employees' extra-role behaviour and the direct influence of transformation leadership, including the idealisation of influence and inspirational motivation. In addition, employees are indirectly influenced by the internalization, identification and the exchange of organisational commitment. The conclusion is that transformational leadership has both direct and indirect impacts on the employee efficiency in each type of organisational commitment. For example, ideal influence has direct impacts on employee behaviour and extra-roles and indirect influences on internal commitment. Followers cherish the same kind of values as a leader do, so they will try their best for an organisation if an organisational goals are their own. Meanwhile, the inspirational motivation causes both direct and indirect outcomes to the extra-roles of internal employees. This is because when the employees are supported by many sectors, they will be happy to face the challenges at work and all the tasks assigned by their leaders. Moreover, an individual's considerations and

intellectual stimulation does not have direct or indirect impacts on the extra-roles. A leader does not possess the role of a person who takes care of and a mentor to them; individual considerations and intellectual stimulation are not the first concerns. However, transformational leadership focuses on the ability of oneself to solve problems. All of these lead to the incentive to focus on what they are supposed to do rather than extra-roles. Also, the roles of transformational leaders do not always directly impact the decision-making process of whether an employee remains in an organisation or not. However, some indirect impacts can be found in relation to commitment to organisational values (internationalization commitment), peer relationships (identification commitment), extrinsic rewards (exchanges of commitment), and trust in an organisation.

In the relationship of transformational leadership and organisational commitment, an active administrator is necessary (Han et al., 2016). The main characteristic of an idealised influencer is that one is a good role-model and passes good attitudes to others. Consequently, followers will develop faith in a leader, especially if a leader is fore mostly concerned with them and an organisation. Organisational commitment is brought about by the understanding and support of a leader; this is in-line with the dimension of inspirational motivation. Other dimensions have very little influence. The systems and structures of an organisation are external, and hence are difficult to control in terms of the relationship to individual considerations. The chain of commands system obscures a clear picture of the problems in a large organisation. It is hoped that transformational leadership ideals and methods are taught to leaders at the administration mid-level (Srithongrung, 2011), or that intellectual stimulation included in individual management (Kenneth Leithwood & Jantzi, 1999) is promoted.

2.6.2   The relationship of transformational leaders and trust

Trust is the variable commonly used to connect the behaviour of a leaders and employees in an organisation. They can be both direct and indirect mediating variables. According to the work of Zhu and Akhtar (2014), the use of the variables of transformational leadership affects trust that is, in-turn, influenced by job satisfaction and work performance. The experiment is a reflection of the behavioral outcomes and

employee attitudes. Two kinds of trust exist, namely affect-based trust (which is centrally about values, beliefs and learning processes). This impacts employees in regard to their self-pride and recognition. Employees recognizing their self-worth is considered part of a social exchange. Therefore, leaders should communicate the issue of self-development with their employees. Second, cognitive-based trust is formulated on the perception of a sensitive leader, depending on the chain of command and relationship with others. This supports the feeling of greater safety, confidence and more cooperation with a leader in the workplace, despite the lack of any external guarantee. Hence, the goal is more focused and performance is the reflection of organisational development. Therefore, affect-based trust is the conceptual assumption of a relationship focusing on the balance of interest. The agreement, in regard to interest, is developed from mature socio-emotional exchanges. An individual's expression can be a form of sympathy, awareness of the welfare of each stakeholder, and trust in that community. A leader should present the socio-emotional relationship and behaviour that followers are themselves expected to exhibit. The relationship between confidence and a leader is therefore crucial, because all a leader's decisions are affected by their followers. Transformational leadership, accordingly, impacts cognitive-based trust which consequently, influences performance. Meanwhile, affect-based trust likewise influences job satisfaction. In the Chinese working context, responses to relationships, affective commitment and employee cooperation is in-line with the research of Shih et al. (2012), which indicates that knowledge-exchanges and employee behaviour can drive an organisation into an advantageous position. There are many factors in the test, such as the system of stipends, an organisational climate and the system of human resources management (HRM). Leadership roles affect behaviour within knowledge exchanges through trust as a variable which leads to cooperation in an organisation. Hence, a transformational leader can unify members in an organisation through relationship management, persuading them to use their knowledge and to develop their attitudes and visions. A leader's behaviour is part of the working environment of the group. As a result, a leader should have the ability to manage the atmosphere in the workplace. Transformational leadership, at its core, rooted in the creation of an atmosphere underpinned by trust among group members. The kind of leader capable of this, thus

has the ability to build-up an atmosphere of trust. The components of organisational trust are discussed as follows. Firstly, it is the belief that colleagues have enough ability and skills to perform in the workplace. Secondly, goodwill is passed on to others based on the belief that personal interests do not harm others. Thirdly, it is the belief that the colleagues in the same community have incentives under fair rules.

In the educational context, it is found that leadership can lead to the transformation of an organisation. Flexibility must be the prime concern in an educational institution. However, it is often very often difficult to be flexible because of hierarchical chain of command structures which are deeply embedded in institutional cultures. Today, leaders have the duty to uplift their educational institutions to the international stage so that it can compete in the world market. Yıldız and Şimşek (2016) argue that trust is an effective mediating variable between the relationship of the transformational leader and trust in the workplace. In comparison with self-efficacy, trust is more influential to satisfaction in the context of higher education and cultural institutes. Trust is the variable that binds individuals together and can be categorised into two groups according to Nyhan and Marlowe (1997). First, personal trust, which is centered on the phenomena of the internal self. Second, system trust, which is the variable that represents social relationships. The meaning of trust is a psychological acceptance of the vulnerability of positive expectations for the intentions and behaviour of others (Rousseau et al., 1998). Expectations arise from seeking outcomes as the result of particular behavioral procedures from those who trust regardless of the monitoring and control of others (Mayer, Davis, & Schoorman, 1995). A leader cannot remain in their position without trust of the followers. Thus, the transformational leader has to be accepted by their followers. The character of a leader varies depending on trust. From another angle, employee expectations in an organisation and the perceptions of a leader are the relationship between an organisation and the employees in the work place. The more trust the employees have, the more influence it will have on organisational performance, behaviour that is formulated from emotional incentives, and attitudes to employ organisational resources for self-learning.

The relationship between transformational leadership and trust is, in sum, used as a mediating variable to their followers' positive behaviour. This kind of

relationship is full of intentions and expectations towards others that the same results will result with all parties(Zhu & Akhtar, 2014). To trust a leader depends on the perception of the work details in an organisation and work performance. That trust is a form of emotional exchange is considered an emotional perception wherein each individual benefit. This kind of relationship is can be compared with relationships whereby leaders and followers care for one another (Shih et al., 2012). If a leader can establish trust among their followers, their hidden capabilities will be discovered and can be applied in the workplace. Everyone would thus gain trust which would rid the workplace of exploitation. The influence of trust therefore must be promoted by powerful parties who impact individuals within an organisation. This can be used to define leaders who know the directions of effective relationships in terms of work management. This type of leader would also know and understand how to transform an organisation to cope with current changes (Yıldız & Şimşek, 2016).

2.6.3 The relationship between transformational leadership and the job satisfaction of instructors

The research of Muterera et al. (2018) formulates a model of transformational leadership that impacts the performance of an organisation and the mediating variable, which here, is job satisfaction. The result is similar to that found in a leader-perception model – both have direct and indirect effects. This research focuses on the performance of the state. Its goal is to develop and support more effective forms of leadership. It also aims to improve employee attitudes as the strategy to upgrading organisational performance. Another goal is to improve the relationship between a leader and their followers at the individual and group levels. The outcome is that whether employees put their utmost effort into an organisation and produce competent outcome or not depends on their feelings, in regard to the work, colleagues and a leader. The proof is that satisfaction leads to self-sacrifice; self-sacrifice required to develop an organisation. This sits in-line with the research of Top et al. (2015) who asserts there is a connection between transformational leadership, job satisfaction and trust. This relationship affects employee behaviour and whether they will quit a job or not. Their research indicates that job satisfaction and positive emotion impacts the individual evaluation and/or experience. Both satisfaction and dissatisfaction in one's

job are part of the field of human resource management that affects the working performance and employee behaviour; such as resignation, organisational commitment, and trust. Likewise, Asencio (2016) explains that the reason why transformational leadership leads to job satisfaction is because a leader's ability is memorable, inspirational and sympathetic to the needs of the employees and an organisation. The strength of the transformational leader leads to changes in terms of individualised consideration as well as job satisfaction. It paves the way towards the beginning of goal setting so that it becomes even more particular and interesting to followers. The characteristics of leaders are inspirational motivation and idealised behaviour. When employees understand working procedures, job satisfaction is achieved because employees follow their leader. Intellectual stimulation is witnessed when employees attempt to settle in the workplace.

Kenneth Leithwood and Jantzi (2005) employ job satisfaction as the main factor in explaining the educational context and indirect influence of an instructor's perception and how career opportunities are related to changes in teacher practices, based on the academic programme. This leads to the innovation of educational policies, in terms of objectives, such as planning strategies for change, pedagogical or instructional quality and internal management practices. This includes organisational learning and collective teacher efficacy. The concept of transformational leadership is significant to those with outcomes. It is no longer about an average leader who gave advice what kind of organisational objectives are. This is in-line with the mediating variable of the environment because the transformational leader needed to act as a buffer zone. The instructors would not lose concentration on their work, when external factors intervened. These can be connected to the social and affective environment that brings about job satisfaction for instructors. The management strategy of transformational leadership is defined to be bottom-up, focusing on cooperation in an organisation. A leader has to cope with, and adapt to, structural changes (Dutta & Sahney, 2016). Zhu and Akhtar (2014) discuss the concept of trust as a mediating variable arguing that the transformational leader should respect their followers. The former invites the latter to join the decision-making process which makes individuals enthusiastic. A leader must understand the basic need of their followers; when followers are aware of what a leader does, they may respond by

improving the quality of their output. This is called job satisfaction. The perspective towards relationships is rather positive for a leader; the mediating variable is affect-based trust. A leader's interactions lead to the creation of a better environment in the workplace; this is the form of social and emotional relationships empower followers to acknowledge the success of their work and take their individual needs into consideration. Consequently, acknowledgement affects resources management that supports followers who would want to be closes to their leader. The sharing of emotion and feeling took place. A leader and followers respected one another. That is indeed job satisfaction.

Moreover, the research that presented the relations of Transformational leadership and satisfaction went in-line with other variables as the outcome caused by a leader's satisfaction. Sayadi (2016) conducted a research that explored the leading dimension and various kinds of leadership.in the context of primary and secondary school in Kermansha, Iran from 2012 to 2013. Findings suggest that transformational leadership has positive impacts on the job satisfaction of the instructors because they can persuade their followers to try harder in the workplace. The level of job satisfaction is higher than expected if an organisation is initiative, creative and develops innovation. A leader's behaviour directly influences the efficiency and outcomes of an organisation as instructors receive intrinsic motivation and job satisfaction when they witness effective work performance. The job satisfaction of instructors is what educational institutions should be concerned with, as this inspires instructors to have hope at the work place and supports attempts to create innovation and new methods of problem-solving. Charismatic leadership increases levels of job satisfaction and value-commitment. Meanwhile, the teacher experience impacts organisational values more than commitment or job satisfaction. This goes in-line with Yıldız and Şimşek (2016) who state that transformational leadership and job satisfaction have the same direction of influence in the context of secondary schools. Trust as the mediating variable is very effective to the competence of an organisation's employees. However, one should not forget fact that competence is related to a leader's closeness to their employees. As such, leaders must pay attention to prominent attitudes involved in the decision-making process. The fact that individuals experience job satisfaction should not be overlooked, because the success

in the workplace comes from an individual's ability. However, organisational trust is more influential than the individual's abilities. Group goal-setting is crucial in this regard. Trust is also considered part of the social dynamics and hence impacts loyalty and the citizens of an organisation. Co-existence is necessary; a leader focused on the overall goals rather than those of individual, is important/. When speaking of transformational leadership and job satisfaction, the relationship between an employee's emotions and all the job descriptions is important to consider. The working-performance of the employees comes from these components; such as perception, wages, work-mentoring, administration, evaluation and the performance of other employees in an organisation.

In conclusion, the gist of the relationship between transformational leadership and job satisfaction are the positive emotions that affect an individual's evaluation. The experience at the work place will indicate if there will be sufficient satisfaction or dissatisfaction to impact one's work performance and employee behaviour. If employees are satisfied, they will typically try to work hard for an organization (Muterera et al., 2018; Sayadi, 2016; Top et al., 2015). According to the feelings of the employee towards an organisation, the effects may be felt by other colleagues and the leader. Therefore, the relationship between a leader and their employees help to bring about cooperation and facilitate individuals to gain appropriate support. They will be indirectly influenced by the social and affective environment and hence instructors will experience job satisfaction in the work place (Dutta & Sahney, 2016). Each dimension of transformational leadership highlights the strength of a leader's personality. For example, within the concept of individualised consideration, a leader must create his or her own job satisfaction. The dimension of inspirational motivation is used to explain when a leader understands the goals and motivations of others. The dimension of idealised influence behaviour is used to explain the model of performance improvement that leads to follower satisfaction as they imitate the leaders actions. Finally, the concept of intellectualized stimulation creates self-transformation, challenging individuals to develop more skills in an organisation, until job satisfaction is achieved (Kenneth Leithwood & Jantzi, 2005). Job satisfaction is therefore the behaviour accepted in the educational institution and is used as one of the fundamental of the practices for employees. Job satisfaction is further

supplementary to improve the work performances and more effective outputs of employees.

2.7 The relationship between instructional leadership and relationship quality variables

2.7.1 The relationship between instructional leadership and organisational commitment

Instructional leadership leads to the overall success of an organisation. Leadership leads to acceptance among instructors who believe that their work-performance in the class is improved when the academia starts to be creative. Instructors are aware of the importance of organisational commitment through the search for new methods of teaching. Appropriate environments pave the way towards trust-building. "Teachers are willing to change very deeply held beliefs about what works in their classrooms when instructional initiatives make sense to them, when they see organisational commitment (e.g. time, materials, space, and expertise) to a new pedagogy, and when the instructional environment trusts their best efforts" Jones (2012, p. 130) referenced from P. Campbell et al. (2019, p. 279) claim that, instructors understand change. Creativity helps build the character of instructional leadership in an organisation. To be part of it is considered a way of supporting human resources and organisational commitment and is also necessary to instructional leadership. The role of an administrator at an educational institution is to support the development of individual competence in different sections at the institute or school. Overall, educational leadership is distributed, as administrators see fit. Students have to be successful if an organisation is to be improved Klar (2012).
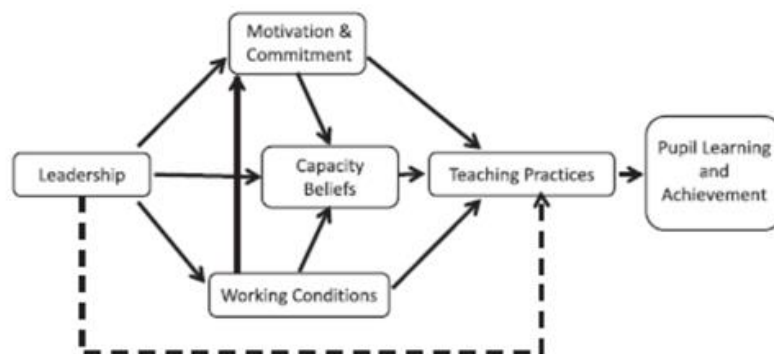
Figure 2.2 Relationship between leadership and pupil achievement model
Source: Pietsch and Tulowitzki (2017, p. 634)

According to the research of Hulpia and Devos (2009), the details of distributed leadership explain organisational commitment. The commitment of the instructors leads to work place performance and the quality of education offered. This is the result of employee's interaction. In distributed leadership and cooperative leadership teams, participation in decision making and other contextual variables are the ideas of leadership. They have to be distributed in different positions. These are indeed some of the individual characteristics necessary to be successful with other leaders at different levels, including the director, the vice director and the head of the instructors etc. As there are groups among the leaders, this results in an administrative structure that becomes more complicated; there will be further conflict among leaders selected by the group members. Therefore, there needs to be clear and concise sets of agreements pertaining to cooperation so that performance is in line with the goals. Organisational commitment is defined as the strength of an individual's identity who takes part in an organisation and is categorised into three groups. First, the belief and acceptance of the goals includes the values of identification and aspirations to try best for an organisation. Next, the desire to become a member of an organisation; this is called loyalty and organisational commitment, which results in more attempts and devotion to achieve goals efficiently and proactively. The variables that affect organisational commitment are transformational leadership and instructional leadership; these factors support the bonds with an organisation and can explain the

relationship between the variables. There is also a relationship with the research of Pietsch and Tulowitzki (2017), who present an outcome-focused model. Their research asserts that leaders' characteristics affect cooperation, participation, commitment, job satisfaction and self-belief. Leaders can influence the terms of class management, academic support, and the environment that induces student-desires to learn and the perception of challenging academic sources. Other characteristics of leadership that impact other mediating variables on academic work are the leader's duties, which depend on the director who is influential to job creation, innovative capabilities, and persuasion, with limited influence on the academic approaches employed by employees. Sheppard (1996) tests the characteristics of instructional leadership focusing on the relationship between teacher commitment, professional involvement and innovation. The results show that variance depends on the characteristics of each school; instructional leadership is an independent variable and the researcher must be aware of looking at the best fitting point. The results find that instructors have more commitment if the monitoring activities are limited. The behaviour of the instructional leadership is therefore considered a component of the instructor model at the educational institution. However, there is no separated set of behaviour that can make the school more effective.

It can thus be concluded that, in regard to the relationship between instructional leadership and organisational commitment, a leader at an educational institution must understand resource management. These understandings must be applied and put into practice as a form of training to employees. This knowledge will be passed to students so that the goals of the educational institution be achieved (P. Campbell et al., 2019; Klar, 2012). Instructional leadership is a characteristic of participants in terms of performance, academia, class management, support, environment, and the perception of the class that challenges students and instructors (Pietsch & Tulowitzki, 2017). Therefore, instructional leadership is very influential to teacher commitment, professional involvement and innovation (Sheppard, 1996). The commitment to the educational institution is a desirable behaviour that the educational institution should be aware of and can possibly lead to further commitment and respect among students in the future.

2.7.2 The relationship between instructional leadership and trust.

This relationship is caused by instructional leadership as a result of behaviour that is more positive than expected in an organisation. Gregory (2017) explains that the benefit of instructional leadership is that it impacts organisational culture and performance through the way's instructors trust their leader. Trust is a positive development in an organisation and can lead to stronger leadership even though the chain of command may be very limited. Distributed leadership effects trust in an educational institution. A leader must face challenges and take care of the feelings of all stakeholders in an organisation and connects to plans for future scaling. Trust improves environments in educational institutions, with positive effects on the community at the school. Therefore, a leader's role is to transform an educational institution into a good living space and to promote better academic interactions. This characteristic of a leader therefore, is considered as 'instructional leadership'. In other words, to make decisions on behalf of other instructors, students and other stakeholders at the school or institute. A leader should also build trust and relationships, be responsible for motivating others, have a transparent decision-making process, and increase activities that promote interpersonal interactions between employees and stakeholders. Without trust, cooperation is impossible. Therefore, trust creates a culture at educational institution which is considered part of the formal and informal structures of interactions among administrators at schools. This includes a leader who is situation-flexible and the model of power relations which is not characterized by a top-down structure. To exercise power requires the recognition and trust of followers towards leaders, whether the former supports the latter in their work or not. Leadership, as a result depends on performance that can lead to different ways of exercising power. It can be said that a leader's ability depends on their experience and expertise in coping with different circumstances; a good leader is a good communicator. He or she understands their resources and the timing of when to exercise power to help teachers, instructors and employees in an organisation. The relationship helps establish trust and faith in the school performance. The fact that a leader recognises the importance of trust in building a working culture at an educational institution leads to the values and creates more working energy. This is in-line with Northfield (2014) who explained that leadership

and administration are employed in the same direction to create knowledge and skills based on context. Leader and administrator assignments depend on the situation, experience and basic regulations according to the indicated paradigm. An instructional leader has the duty of identifying how to control and monitor instructors, because their performance impacts academic procedures and the needs of students. The fact that instructors perform according to indicated guidelines is a result of trust created by instructional leadership; what a leader does to employees. When trust exists among employees, positive influences towards pedagogy occurs. However, what actually affects instructional leadership is the hierarchy of the chains of command and the procedures of the administration. Research identifies that leadership at an educational institution should be related to the concept of legitimacy in establishing power for development and the monitoring of the relationship among and between employees which brings about support and confidence among instructors and leaders. To understand the influence, expectations and the context of leadership, makes trust possible and able to be maintained. Multi-dimensional paths to success also establish trust towards leaders or directors in a school. That has to happen simultaneously with behaviour that establishes relationships, interactions and communication among colleagues. Educational trust is included in three-dimensional trust. The next dimension is task ability that includes competence, consistency, and knowledge/skill. In addition, interpersonal ability is about integrity, the care of others, and character.

The concept of instructional leadership in schools is important to an effective educational institution. Lesinger et al. (2016) present the relationship between school culture and instructional leadership arguing that trust – in an organisation – has a continuous relationship with the three variables in terms of culture as a result of higher leadership. After instructional leadership is successful, instructors will exhibit higher levels of performance which impact the trust within an organisation. All of these outputs are significant in terms of statistics. The instructional leader requires cooperation and trust from the school administrators. The condition which makes trust at a school possible is related to various factors concerning the administrators, employees, and organisation in the school. Therefore, communication between the administrators and employees is crucial to establishing trust which impacts incentives

and opportunities to reveal needs and expectations among colleagues. This is in-line with V. M. J. Robinson (2010), who discusses the effects of instructional leadership relevant to leaders abilities which bring about efficient performance. A leader should know job details and be able to solve complicated problems; this would boost trust and relationships with employees, parents and students. The methods to establishing trust are limited in the relationship as a form of socialisation. A leader can establish influence towards a number of groups in the organisation so that the objectives are achieved. In other words, a leadership capability is strongly connected to trust between the instructors and the director. If a leader's practices are to establish trust, it will impact the attitudes of the instructors, an organisation and can even be expanded to the success of the students. If instructors are negatively impacted by a leader, trust may completely disappear as will the perception of organisational commitment. Therefore, trust level in the relationship are a reflection of the expectations and appropriate agreement within it. This leads to interdependence among members with different roles. However, when the negative impacts lead to mistakes, trust is still considered a factor for success. Yet, the group must put their efforts in maintaining trust it as a key resource for the school's development and the transformation of students in the learning process.

It can be briefly concluded that a leader and trust should come together to form a unified set of norms and culture. Trust influences the well-being of the organisation as a result of environmental management and improvement at the educational institution (Gregory, 2017). The relationship, in the form of socialisation, contains the interactions of behavioral management, which itself contains agreements for interdependence and trust (V.M.J. Robinson, 2010). The communication between a leader and employees is an important variable because it recognises the expectation and needs of the colleagues. The outcomes of such a union would be increased efficiency and effectiveness and initiatives by the employees to create new teaching and learning procedures. Administrators and employees with the characteristics of leadership may rearrange the hierarchy of the chains of command in the administration. There would be responses to the evaluation and monitoring of the methods in the form of human resource management. Therefore, trust is established (Lesinger et al., 2016; Northfield, 2014).

2.7.3 The relationship between instructional leadership and job satisfaction.

The study of the relationship between job satisfaction and instructional leadership pays attention to school leaders, including the directors and vice directors. The employees at schools establish paths towards implementing various policies by educational institutions. According to Grissom and Loeb (2011), instructional leadership is important in that a director's skills impact job satisfaction among instructors. This is because the director is the locus of power among all the stakeholders in a school. The lower the levels of job satisfaction are, the higher the rate of job resignation will be. The skills of the instructional leader, therefore, would be to understand the academic needs in the educational institution, human resource management, and the best recruitment methods for the school. The working environment and a leader's performance are smooth when they are in-line with the academic programmes. Human and other researchers looked at these mechanisms. This is in-line with the research of Shen et al. (2012) who indicated that job satisfaction affects performance with two kinds of variables. First, school processes for example, the type of particular career, condition in the workplace, colleagues and supporting departments all influence students' behaviour and the authority granted to the instructors. The basic variable of a leader or the head is also significant. Academic guidelines are expected to focus on the director with the academic characteristics. Workshop for the head of the instructors should be organized so that each individual has instructional leadership. Increased job satisfaction will be achieved and filled with experiences in terms of technical development in the work place. The literature on job satisfaction is influenced by the theory of incentives of Herzberg, Mausner, and Snyderman (1959) and Sylvia and Hutchison (1985) which indicates that satisfaction is related to high levels of desire with regard to individual needs and incentives at work such as success, responsibilities and the chance of promotion. The job satisfaction depends on relationships between instructors, students, instructors and their colleagues. The concept of satisfaction of instructors has the characteristics and meaning of job fulfillment. In the presentation of performance and job comfort, job satisfaction influences performances according to all conditions. According to the perspective of the instructional leader, his or her duties affect job satisfaction. Ilgan et

al. (2015) for example, discuss academic procedures in Turkey when directors monitor education and the lack of career promotion for instructors. Their personal lives are also monitored and hence the monitoring behaviour affected the instructors' job satisfaction levels. It can be stated that instructor's job satisfaction levels are part of serial behaviour in many forms, such as organisational and career commitment of the self. This leads to employee behaviour that paves the way towards performance output. The behaviour and attitudes of the directors who are instructional leaders can enhance the environmental conditions of the educational institution which results in positive behaviour and increased job satisfaction of employees. The instructors' job satisfaction is increased when their attitudes towards their career are enthusiastic and marked by the willingness to achieve goals. This is in-line with the analysis of Thobega and Miller (2003) who argue that an instructor's duty to monitor academic matters leads to job satisfaction. In addition, the research examines the instructor's experiences of collaborative supervision in agricultural activities in Iowa, USA, indicating that monitoring partly helps increase job satisfaction and the desire to teach. Extraneous variables in the educational and collegial environment are used to study the same outputs. The components employed in the study of monitoring are observation, pre-observation, conferencing, post-observation conferencing, supervision support and supervision guidance, respectively. Within this research, it is found that the satisfaction of instructors cannot be estimated. When comparing with these inexperienced persons, the research also found that more experienced instructors experience more job satisfaction.

The instructional leadership, according to Boyce and Bowers (2018), compares school directors who understand individuals and organisational structures of educational institutions. Instructional leadership can be distributed to the instructors to empower their decision-making processes. The original framework of instructional leadership is only intended for school directors. However, as the number and range of instructors' duties increase, so too does instructional leadership become necessary in the administration as it bridges roles in the workplace (formal and informal), with instructors. Therefore, it is considered distributed leadership in which a leadership is properly found in a both formal leaders and followers, depending on the context. The research looks at the relationship between instructional leaders and human resource

management factors, including teacher satisfaction, commitment, and retention by using the data from the School of Staffing Survey (SASS). The data, which is stored at the US National Center for Education Statistics, found that a director's instructional leadership in an educational institution is comprised of the characteristics of community building, provisions of professional development, initiatives in curriculum-creation, teacher supervision, communication, the vision/mission of the school, and student learning and support, respectively. These directly influence the instructors job satisfaction levels, organisational commitment and the desire to remain employed at the educational institution. Such a direct influence on a leadership also affects the instructors desire to work. However, when considering the environmental background of the school, freedom and the influence of internal instructors, the school is more affected by direct influence if compared with how a director's leadership affects the working desire of the instructors. As it is the indirect influence, in regard to the environment of the school, the research finds that job satisfaction is higher than other factors. This is connected to the duty of the instructional leader who may desire to develop the school according its guidelines. Academic monitoring, evaluation and resource management, thus, may be an appropriate strategy for educational institutions. A director with instructional leadership would learn the kind of leadership appropriate to the followers.

'Leadership for learning' is investigated by the research of Dutta and Sahney (2016) who study the indirect influence of instructional leadership with instructors job satisfaction. School directors in India have the dimension of a school leader. However, the researcher employs the concept of transformational leadership and instructional leadership with job satisfaction. The outputs, consequently, present an overall picture of leadership at the educational institution showing that there is no significance towards job satisfaction when the dimension of instructional leadership is separated and analyzed within the physical environment as the mediating variable. The environment includes teaching media, classroom and the conditions laid out in the job description which all plays a role in the academic success of the students. This is because the director has to run an academic management panel with the concern of sufficient facilitation of resources to the instructors. The environment at an educational institution and the classroom can create an ambience that can motivate

instructors to be successful. Moreover, instructors' behaviour can be more positive and successful in their career, influential to others and become the incentive for the well-being of the organisation. A good policy for educational institutions, therefore, should be to appropriately support their instructors. An instructional leader's regulations of an administration are top-down, focusing on the academic activities and the development of school. The foundation of learning, control of the employees and the guidelines towards academic success are key concerns.
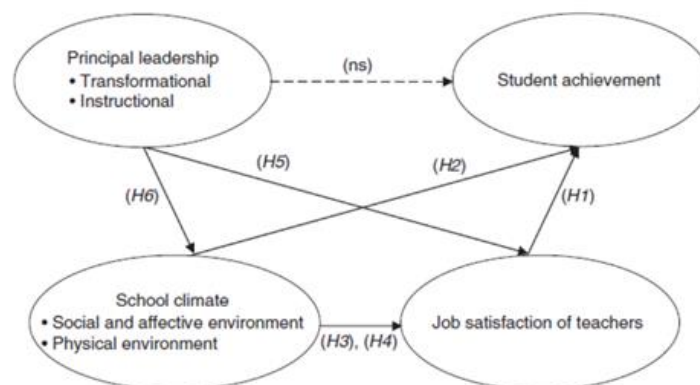
Figure 2.3 The full (or saturated) path-analytic model showing the nomological network of hypothesized relations

Source: Dutta and Sahney (2016, p. 946)

To look for the relations of the instructional leadership, one must be concerned with the duty and scope of the relationships. Job satisfaction should depend on an increase in the effectiveness of educational institutions and the dynamics of the relationship between the leader and followers in the interests of upgrading an organisation. In contrast, if the behaviour of a leader are bad it would affect the employees. They would be dissatisfied in the work place (Nazim et al., 2016). When instructional leader do not possess the qualities to perform well, it affects individual's behaviour within the educational institution. Gumus and Akcaoglu (2013) argue that institutional leadership sometimes has negative effects on employee behaviour because of the external environment. This is considered a type of resistance. The duty of a leader at an educational institution is to support their instructors to find methods of teaching that lead the students to success. The academic pathways should be developed so as to be flexible for instructors. The literature talks about Glickman's

argument, who focused on the importance of the director in instructional leadership (Glickman, 1989). The ability to communicate is crucial, he argues, to facilitate the personal development of the instructor's careers. In the context of Turkey, there are times when instructional leadership has been unsuccessful because the director's management is not strong enough. The policies in both the private and state sectors emphasise a façade of success rather than the true success of the students and the development of the instructors. The policy of the Ministry was state-centric and did not pay much attention to the local levels. The directors did not see the importance of education and workshops to increase the ability and skills of a leader when using the information. This negatively impacts the educational system at schools. The management of upgrading instructors' skills depends on the support of career development and the increase of instructional leadership skills.

The relationship of instructional leaders and job satisfaction is important in that a leader should apply with the educational institution. For the experienced leaders, this helps control the behaviour of employees and increase the feeling of job satisfaction that further drives successful outcomes as indicated in the vision and mission of the school. Instructional leaders, therefore, should focus on every step of the academic arrangement that impacts the behaviour of the instructors and students to improve their experience (Shen et al., 2012). The instructional leader is the center of the stakeholders in an educational institution. Academic skills are variables that upgrade job satisfaction and lessen risky behaviour when employees perform. The instructional leader should monitor the relevance of the academic programme and human resources (Grissom & Loeb, 2011). Institutional leadership is commonly found when the director leads the panel of resource and human management (Boyce & Bowers, 2018; Dutta & Sahney, 2016). A leader in an educational institution help support instructors to sustain external resistance (Gumus & Akcaoglu, 2013). Therefore, instructional leaders have to be capable and flexible in human management so that job satisfaction will not be affected (Nazim et al., 2016).

2.8 The relationship between structural context and demography: the effects on satisfaction

Kenneth Leithwood (2016) explains that a leader's expertise needs to be related to the pedagogical content of their knowledge, meaning that teaching and learning techniques must be developed from a respect of the work, devotion and the duty of instructors. Directors and the instructors are not the same. A leader role of each profession must exist so that each individual's experience supports the trust-building process between the instructor and a leader and to initiate the chance to for school innovation, as well. It can be briefly concluded that the components of job satisfaction depend on context and the educational foundation in each country. The level of the influence on the job satisfaction varies. For example, in Turkey, demographic, socio-psychological and economic factors are worth mentioning. Gender, the hierarchy of school, the courses, and the level of experience are all factors. The outcome of the research is that gender did not have any effect on satisfaction but has direct effect on the hierarchical structure, especially in primary schools. This is because there is less responsibility, so satisfaction levels are higher if compared with middle schools and vocational colleges. Research has also found that the more experience an instructor has, the more job satisfaction they will have, also (Ilgan et al., 2015).

Lesinger et al. (2016) states that the relationship with demographic variables includes gender, age, seniority, work experience, and academic seniority. Meanwhile, the factors related to the institutional leader include the characteristics of administration; academic behaviour, teaching techniques (of the institutional manager and instructors), the duty to monitor the class and the different teaching methods (including the use of technology). According to Hulpia et al. (2012), who discusses the contextual relationship between demography gender and seniority, females generally display more organisational commitment than men. Furthermore, the higher the level of the work experience, the lower the level of organisational commitment one will possess. In terms of the structure of an educational institution, the size of a leadership team, the type of school, and the religion of the school, all impact commitment. Even if the school is big, it can become like a two sided. The negative

side would be that communication would not cover every part of the institution. Moreover, according to Southworth (2002), the most influential instructional leaders depend on the gender and size of the educational institution. These further depend on the context of the country, which can be various as cultures differ significantly.

Hulpia et al. (2009) state that administrative and communicative structures are complicated because there are a number of members who are also a leader in an educational institution. That can very often lead to conflict. It is not only the factors in regard to demography in educational institutions such as gender and work experience that affects commitment, structural characteristics are also worth mentioning. The size of the school and the denomination of the school are crucial factors. For example, different types of schools affect organisational commitment. They can be private or state schools focused on general or vocational education. The result is that each instructor is aware of how the school should be defined as an educational institution. Demographic variables can have negative effects. When their instructors have a lot of experience, organisational commitment decreases. Meanwhile, the number of leader groups did not have any impacts on organisational commitment, meaning that commitment is built more from the instructors as individuals rather than as groups.

Foster et al. (2008) explain how demographic context impacts organisational commitment citing the numerous forms of commitment, which are dependent on loyalty. Loyalty is not found only at the individual level but depends on factors such as the role, gender, circumstances, and age of the employees. In terms of gender, the findings of the research indicate that females show more loyalty than males when they work as a sales assistant. Meanwhile, if they work as a retailer, males display more loyalty. This is a reflection of the fact that organisational commitment depends on work-experience, the characteristics of the individual, and the role in the work place. At the same time, the role at the work place results in different kinds of commitment. In one case, research showed that a senior manager of a shop with a very high level of commitment was caused by the awareness of the cost of living. According to Gumus and Akcaoglu (2013), in some demographical contexts, work experience and gender are used to look at the influence on instructors attitudes. Some findings suggest that gender of the director at the educational institution impacts academic attitudes, teamwork, emotions, decisions and individual perceptions. The research shows that a

male director has a greater impact on perceptions compared with female directors as the traditional selection process of the system makes employees more satisfied with male directors with higher levels of instructional leadership.

In the classic research of Kenneth Leithwood and Jantzi (1999), the concept of the transformational leader leads to increased abilities in the areas of self-improvement and organisational commitment. The scope of each variable has different outcomes. The examples are school conditions, the sharing of a vision, communication towards goals, planning, organisational culture and classroom conditions. This helps shed light on the relationship of leaders that are influenced by groups rather than individuals. There are two factors that cause satisfaction, cited in the relevant literature; demography (Foster et al., 2008; Ilgan et al., 2015; Kenneth Leithwood, 2016), and organisational structure (Gumus & Akcaoglu, 2013; Hulpia et al., 2012; Southworth, 2002). Both directly cause satisfaction. The administrator must formulate policy to drive further development and a healthier educational institution, as it is obvious and easy to measure the success. Each measurement hinders individual development. Therefore, proper data collection needs to be conducted to help an organisation's employees.

2.9 The relationship between transformational leadership and the influence of the quality of relationships on the loyalty of leaders in educational institutions.

2.9.1 The relationship between transformational leadership and loyalty to a leader in an educational institution.

The research of Han et al. (2016) finds that transformational leadership leads to increased employee pro-social devotion, in the context of South Korea, where behaviour is influenced by the culture of Confucianism and numerous kinds of relationships based on social structures and the chains of commands in the group. The research shows that an organisation may vary depending on the relationship between a leader and the followers, and may resemble a family circle. This relationship influences people's thoughts and behaviour because of available information and their internal perception. Motivation can lead to a transformation in an employee's attitude.

This supports the energy required to share knowledge with the employees and also supports higher levels of competition in the world market where the movement of labor is common. To add value to employees is a strategy in-line with the characteristics of transformational leadership in education circles, according to Kenneth Leithwood and Jantzi (1999). In education management, it is necessary to promote the self-development of the employees. However, within transformational leadership is crucial to solve problems such as how to persuade the employees to do so and bring about increased organisational commitment. The transformational leader is an inspiration to their followers to achieve their goals; leadership in educational institutions and the academic outcomes of the students. The possibility of educational institutions must be relevant to leaders, including the school goals, the structure of the school, social networks, employees, and the organisational culture. However, the thesis statement is that the internal employees are aware of the direction towards the objectives set by the school and an understanding of the meaning of the practices. This leads to the self-development of individuals. This is strongly connected to planning and concerns the organisational culture that leads to development, values and practices.

All of these are combined within the analysis of loyalty as connected to behaviour and organisational outcomes. Wu and Wang (2012) show the relationships within and between charismatic leadership as a part of transformational leadership and the differences in each step of peoples' behaviour finding that there are indeed connections between the transformational leader and a leader with extra-expertise. For example, in the context of business competition in China, the cultural system focuses on power, self-making processes, and loyalty towards the those in a position of higher social status. The system of a leadership with extra-expertise includes the use of persuasion theory, social exchange theory, and social identity theory, respectively. This is because a leader has expertise impacts performance and the rate of resignation through the mediating variable of loyalty. The reason why the Chinese context is brought into the analysis is because there have been major economic changes that have affected the global arena. In China, people with knowledge are respected and recognized and others are loyal to these people, in accordance with Confucianism. The concept of harmony, reciprocity, trust and loyalty are supported in an

organisation. The research pays attention to the mediating variables that explain loyalty towards a leader. This is a complicated issue, so a leader has to respond to the needs of an organisation's members at different levels and has to adapt to social changes as well as the followers themselves. The connection between loyalty and attempts to perform at the work place are underlined by social exchanges and social bonds and interpersonal harmony. Therefore, individuals seek trust and loyalty. A leader is the factor that influences employee behaviour and attitudes according to social relationships as their basic foundation. A capable leader should support their followers in the long-term so that they will not fail. An organisation has to hold workshops for a leaders and administrators so they can improve their competence and better understand various situations from the employee's perspective (Schrag, 2001).

In conclusion, transformational leadership impacts the loyalty towards a leader, as a leader always impacts their followers. They are aware of the direction of their leader and can adapt themselves accordingly. This mechanism of the transformational leader impacts the attitudes of the followers when they must be creative. Employees' knowledge and competencies in the labour market have to be improved. A leader has a crucial part in adding value to their followers (Han et al., 2016). Loyalty and leadership influence the emotions of their followers in the workplace and in an organisation. A leader has to transform the environment to become appropriate to the changes (Wu & Wang, 2012). To have a transformational leader or administrator helps an organisation achieve its goals and solve various problems. This kind of leadership can motivate an organisation to look for new methods of transformation. Internal employees, therefore have to be aware of the appropriate direction and how to achieve the goals of the school, and in addition, try to understand them. Loyalty to a leader is necessary because it is the channel through which an organisation attains success, as is loyalty to an organisation.

2.9.2 The relationship between an organisational commitment and loyalty to a leader at educational institutions

The forms of commitment are the foundation of loyalty, as explained by Ting and Yeh (2014). The significance of qualitative variables on relationships, job satisfaction, trust and organisational commitment are mentioned as they affect the

loyalty of the teacher group at a primary school. The dependent variable is the teacher's gratitude. Research has categorised loyalty into two types. First; behavioral loyalty which is rooted in the intention to constantly provide service and maintain a relationship with an educational institution. Second, attitudinal loyalty concerns the instructors' spiritual commitment which supports their attitudes towards the school. According to Chaudhuri and Holbrook (2001), the qualitative variables of relationships have different impacts. Trust does not affect behavioral loyalty but attitudinal. Job satisfaction impacts attitudinal loyalty but not behavioral. However, organisational commitment impacts all of the above. The variable of commitment towards the educational institution are considered a direct influence on trust and job satisfaction which affects loyalty and are also mediating variables that pass over trust or job satisfaction to loyalty. The emotions towards an educational institution are independent variables become dependent variables meaning that organisational commitment is more important than trust and job satisfaction as the factors that affect loyalty. Mostly, organisational commitment with professional norms has a relationship to loyalty. In other words, the employer is supported by the employees. Organisational commitment with professional norms prevents a work-life conflict from happening because the agreements at the work place and personal life motivate individuals to be more loyal than satisfied with their job (Dorenkamp & Ruhle, 2018). This is in-line with Kont and Jantson (2014) who argue that the concept of commitment and loyalty are related to each other. Because of the two, the individuals have more career choices. Communication between the employer and employees is paid attention at and upgraded to establish career stability. The more committed one felt with the relationship, the more likely one became loyal to the person involved. However, individuals would be more committed to the person they trusted than to the job. This is one of the characteristics of the relationship with job satisfaction. Then, employees will accept the goals of an organisation, be pleased to solve the problems, and be willing to remain in an organisation (Spector, 2012, p. 228). A job in an organisation is part of the invitation that people would consider whether to join it or not. Therefore, self-improvement can be witnessed. Loyal laborers will accept the fact that they must strive their best until to achieve success. Success will then be shared with an organisation over the long term. Loyalty is similar to an individual's

responsibility towards the job. Consequently, an organisation should seek a structural programme that helps develop employees' careers, the methods to provide better pay, appropriate wages and to launch cultural innovation. A learning culture in an organisation can be developed to bring about job satisfaction and loyalty. Moreover, in university libraries, job satisfaction should be recognized. There is a direct relationship between the colleagues and the commander. This includes internal systems in an organisation. The significance of employees should be recognized. If an employee's duty is in-line with their professional career according to expectations, this will be considered a positive thing in an organisation. It means that the employees are well taken care off. There is more commitment towards the career than an organisation.

On the other hand, when organisational commitment is employed with the hope that the individuals will be loyal, research finds that the relationship between an organisational commitment and employee loyalty differs providing an advantageous position. This significantly benefits an organisation in many aspects, including capital and interactions among and between customers and employees. Foster et al. (2008) explains the context of property business, pointing out that the employee loyalty creates a positive relationship towards the industry. Loyalty, in other words, bridges the gap between the retailor and the shops. Organisational commitment and loyalty have different definitions. For example, they represent different sets of moral values among the individuals and in regard to the behaviour in the workplace. Considering this context, it is the organisational space where the performance and course of action among individuals, unions and professions takes place. When comparing this with organisational commitment, the individual needs to have the desire to remain in an organisation and be committed. All these factors represent emotional bonds between the individuals and their behaviour. What happens in t society, with economic factors, leads to changes in loyalty which responds to emotional ethics. An organisation should possess active administrative approaches to understand its employees and establish loyalty. This is in-line with the statement that commitment can be both active and passive, as argued by Sargeant and Woodliffe (2007). Organisational commitment is defined by the fact that it helps fortify the relationship that can lead towards success and the development of values. The variables of an organisation

relationship are very close to loyalty and trust. Loyalty is defined to have the same meaning as trust by some scholars. Others consider commitment to impact loyalty. The relationship between trust and organisational commitment is considered procedural commitment in that something has to precede the other; trust comes before commitment. This relationship is connected to security and sacrifice. Commitment is possible only if there is organisational trust (Garbarino & Johnson, 1999, p. 77). Commitment employed in this thesis can be classified into two types; active and passive. Active commitment is when participants believe and are passionate with the results and are connected to affective commitment. Meanwhile, the passive commitment concerns the support of the individual not to overlook the behaviour that leads to inertia in the workplace. It can be said that the variables such as the perception of risk, shared belief, perceptions of service quality, the connection between the individual and organisation and trust are independent variables that have to pass through the mediating variables. They are an example of how organisational commitment affects loyalty. Those who donate money to an organisation are an example. These individuals try to significantly relate themselves as employees in a non-profit organisation through active commitment. They believe that trust is the variable that takes care of the relationship until there is a direct influence on loyalty.
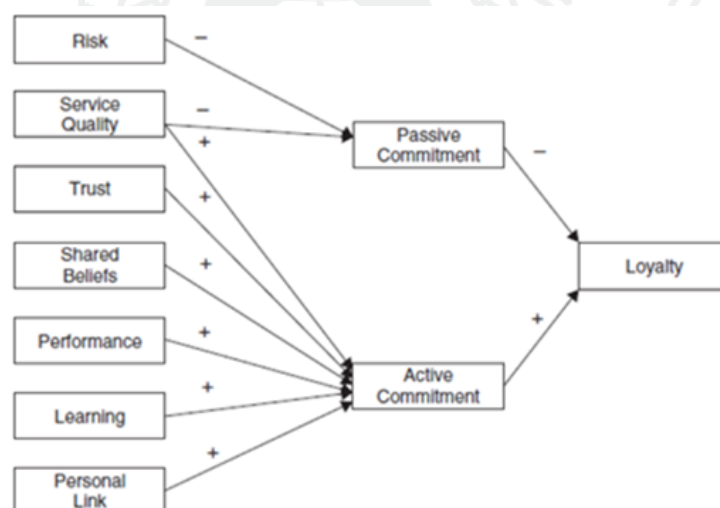
Figure 2.4 Hypothesized model of loyalty

Source: Sargeant and Woodliffe (2007, p. 57)

When compared to the business context, a customers' behaviour, in terms of loyalty is reflected in the repetition of purchase, recommendation and support of the products, according to Dawes and Rowley (2000). They defined its dimensions based on the business context using attitudinal loyalty to define cognitive perception, emotion, and confidence in the products. In this case, loyalty in the business context is applied with education. There is a comparative statement that the environment of high education is complicated and different, so it is different when students' experience is described as product. It is also different when evaluations are used to develop the product. Yet, the business sector employs methods of customer service as a form of evaluation. Therefore, customers have the power of decision-making in this relationship (Sampaio et al., 2012).

Loyalty and organisational commitment are connected through a mutual foundation. An organisation likes to establish commitment for the job and security for its employees. An individual's organisational commitment can make an employee accept the goal, take part problem solving, and be willing to remain in an organisation (Foster et al., 2008; Kont & Jantson, 2014). A leader must believe in their followers. Meanwhile the followers must believe in their students (Sampaio et al., 2012). Loyalty is categorised into two types. First, behavioral loyalty, which intends to provide continuous service and maintain the relationship with the educational institution and attitudinal loyalty (Ting & Yeh, 2014). Attitudinal loyalty is employed to define perception and to understand individual emotions. Behavioral loyalty leads to repeated implementation (Dawes & Rowley, 2000).

2.9.3 The relationship between trust and loyalty to leader at the educational institution.

S. H. Lee and Fenich (2018) explain this relationship by stating that trust is the mediating variable of value and loyalty is the independent variable when people cooperate. Here, trust refers to the belief in the logo of each product. Customer confidence in the product leads to commitment. This research framework presents trust as a mediating variable with others. The more one trusted someone or something, the higher the value is. This leads to attitudinal relations in the same direction with an organisation. It also motivates attendees to take part in activities held by an

organisation. Another mediating variable is the association affect. According to the literature, the form of values and loyalty varies depending on the business context. The market focuses on customer behaviour. Therefore, loyalty is a profound part of the commitment-building of the brand where it is hoped that loyalty is repeated again in the future. Accordingly, there are two types of loyalty; behavioral and attitudinal loyalty. As already mentioned, the research of Sampaio et al. (2012) who surveyed the high education system in Brazil, states that trust and values are mediating variables that lead to the student loyalty in their perceptions. The output is that they trust their academic field, and this kind of trust in the employees has positive impacts on the students in regard to the administrative policy and implementation. This also impacts trust in their academic field, administrative approaches and implementation in the perception of values which further affects loyalty. The approach to examine trust in the literature can be summarized that an organisation wants to establish a perfect relationship with the customers, by fortifying the individuality of the stakeholders because this will upgrade the quality of the relationship.

Aldas-Manzano et al. (2011) research examines the roles of satisfaction, trust and the frequency on risk perception, with the employment of loyalty of the banking online customers as the mediating variable. The findings indicate that satisfaction has only one way of relations with loyalty an affects the variable of risk perception. Trust is considered a form of relationship. This explanation is in-line with Perin et al. (2007). Loyalty is a form of repeated behaviour and is the result of commitment and appreciation with someone or something. Satisfaction and loyalty are formulated when receiving what is expected. That expectation is compared with what an individual has received in the past. This can be an asymmetrical relationship that impacts the building of loyalty and performance. Satisfaction is a temporary behaviour related to continuous business exchanges. This will not stop until the procedures reach their final stage. Satisfaction includes trust and loyalty. Trust is formulated in the human interactions with the condition that the members of the groups believe in other peoples' statements without any enforcement of regulations. Trust leads to coherence, capabilities, honesty, responsibility, idolization, and integrity in the work place. Trust is related to the variables such as belief, emotions, and fear. Accordingly, there are two types of trust. First, the relationship among the

customers and the employees and the administrative approaches and policies of the company. Administrative approaches must go in-line with the vision and mission of an organisation so the goal can be achieved. Two forms of beliefs and their influence need to be identified. Satisfaction leads to trust and organisational commitment leads to loyalty. In addition, loyalty leads to trust and organisational commitment. Trust in an organisational context leads to loyalty at a higher level. Commitment takes place as a result of social exchanges and is the foundation of relationship maintenance because of the participation and exchange procedures. The relationship between trust and loyalty are reciprocal. The company must invest in the relationship by connecting to the administrators' attitudes with values, the exchanges between the customers and the company. These are important values and can make the company succeed in business. Transformation in terms of values, security and loyalty are focused. Value building, therefore, is considered a quality-essential construct.

Trust is part of the confirmation that the educational institution's quality. This leads to loyalty in the form of institution, leadership and instructors. Higher levels of trust lead to more valuable institutions. Confidence in the employees includes the types of attitudes that educational institutions employ as to promote loyalty with a leader. This can be upgraded to the organisational level (S. H. Lee & Fenich, 2018). Certainly, mediating variables have outcomes in other forms of behaviour that support loyalty towards a leader and/or educational institution (Aldas-Manzano et al., 2011). Trust that is in-line with the values as well as the beliefs of an educational institution impacts procedures and interactions that connect employees. The educational institution, therefore, may be successful because of the relationships of trust and behaviour which are in-line with the policies and the vision that have been previously indicated (Perin et al., 2007; Sampaio et al., 2012).

2.10 The relationship between job satisfaction and loyalty to a leader at an educational institution

External individuals who gained and lost benefits are mainly customers and stakeholders. This kind of external direction leads to a positive working environment and improves behaviour in the work place. The research of Peltier et al. (2006) discusses the satisfaction of nurses and the loyalty that can attract employees to

remain in an organisation. Since employees' experience job satisfaction, they can experience organisational commitment as well. It is popular for internal marketing and the establishment of the marketing relationship using independent variables that support performance. They are, structure bonding, social bonding, financial bonding activities and the quality of care. There is a direct influence on job satisfaction among nurses. The quality of nursing comes from the positive performance of the nurses themselves which is also perceived by the patients. In return, nurses experience job satisfaction and will want to continue their work and invest their energy to improve their performance. The best variable is the quality of relationship. Its basic variable is trust, commitment and job satisfaction; elements which establish the relationship and success in the work place. Individual perception is a related factor that leads to psychological outcomes which are connected to quality and job satisfaction.

In reviewing the literature on loyalty on assistant professors by Hoyt (2012), the employment of job satisfaction in the class is paid attention to. Job satisfaction output covers the quality of the students, autonomy in the workplace, the support of the academic field, and integrity. The privilege of being an assistant professor helps forecast the loyalty of the adjunct faculty. The research focuses on heavier assignments to improve the quality of the class discussing job satisfaction between the fulltime and part-time employees in relation to teaching position. The findings indicate that both types of loyalty can be estimated but with different causal relationships which are dependent on gender, race, and ethnicity. Moreover, the factors in regard to the position, policy, administration and other kinds of job assignment rather than teaching have implications for organisational loyalty, too. When employees experience job satisfaction, loyalty and the willingness to remain in an organisation is impacted. Job satisfaction, indeed, can result from wages, successful performance, promotion and other roles in an organisation. However, what can lead to negative performance is the influence of seniority and labor unions. Persuasion theory explains some parts of the formulation of satisfaction and the result of loyalty.

Moreover, job satisfaction is the foundation that brings about trust and organisational commitment (Rojas-Méndez et al., 2009) which further impacts the loyalty of students, the perception of the service quality, group relationships, job

satisfaction, trust and organisational commitment. Research finds that the perception of service quality and job satisfaction indirectly influences students' loyalty as well. Among the mediating variables, organisational commitment is the most influential because it directly impacts others. Job satisfaction can be considered a mediating variable connected with trust and commitment. Trust is the mediating variable related to more than two groups. It is, moreover, the foundation that leads to loyalty. In other words, trust in an educational institution comes from employee experience that has been enriched in the institution that should establish a relationship in a long term to develop trust with others. Organisational commitment is the mediating variable of satisfaction and behaviour. An increase in organisational commitment is caused by the integration between education and society. Organisational commitment, therefore, should be in-line with skills, the system of values, expectations, demands and values of the university.

Job satisfaction is related to loyalty in the form of contextual perceptions through work performance. When a job is completed, employees would continuously experience the same feeling of support and self-development. This has a continuous impact on their attempts to work (Peltier et al., 2006). The possibility to combine work performance with demographic factors such as, position and related job details, can affect job satisfaction and the loyalty of employees towards an organisation and the respected persons (Peltier et al., 2006). Therefore, it can be said that job satisfaction is a variable that develops internal relationships in educational institutions. The experience and the relationship with an organisation are considered to be part of loyalty (Rojas-Méndez et al., 2009).

2.11 The relationship between transformational leadership and needs satisfaction

The matching of the needs satisfaction dimension and transformational leadership is covered in a number of studies. Transformational leadership is embedded in the needs satisfaction in many aspects. For example, Hart and Thompson (2007) conduct research on transformational leadership and the satisfaction of the athletes towards leaders and the performance of coaches. In their research, the dimension of transformational leadership is matched with the concept of needs. The

transformational leader should understand their followers needs at the initial stage so that commitment and performance are effective. A leader seeks the needs and high level of job satisfaction among their employees. For example, the athletes had different aspects of needs and applied to them through transformational leadership. For the need of autonomy, the coach must support the athletes and find the best way to facilitate the performance. This dimension is called intellectual stimulation for support and to communicate vision. When this is cherished by athletes, they strive their best for victory; this is called inspirational motivation. The athletes feel they have a choice to think and that stage is described as individualised consideration. Guidelines then are put into practice. Next, the coach should be aware of the athletes needs for competence and motivation to promote creativity in problem solving and innovation on the field. The coach must be the person who connects expectations and inspiration to the athletes. This includes individualised consideration in terms of support, response and giving advice for career growth. The need for relatedness is that the coach understands the athletes' needs and individualised consideration. The relationship between the coach and the athletes depended on the basic moral foundations. They sacrificed for the team and make the connection between the goal and implementation. Idealised influence brings about athletes' trust in their coach and groups feelings.

This is in-line with Hetland et al. (2011) who matched the dimension of needs satisfaction and transformational leadership. Transformational leadership is the active form of management that controls external mechanisms by adapting the liberty of decision making of their followers. It means that their followers should not have too much autonomy to do what they want. It is a fact that a leader can explore and control the behaviour that can lead to positive relationship. This happens when they control the outcomes as expected by the organisation. The forms of positive relationships depend on transformational leadership. The working environment and basic needs should be recognized and followed up on by the transformational leader. The procedures of internal motivation should be put into practice to promote development, especially the need for competence. What individuals have to deal with in the environment should be in-line with the dimension of intellectual stimulation and individualised consideration which support the development of problems solving

abilities and fulfill the leaders' vision. Next, the need for relatedness and belongingness are forms of social relations that the individuals has to adapt themselves to the group. The behaviour would be adapted with the knowledge of arts (knowing how to work) and the trend of causality. The transformational leader has the clear and coherent methods to cope with changes. Charismatic leaders, moreover, would take care of the need for autonomy by motivating the followers to stand up with their own hidden capabilities. Leaders would help the followers find their own ways with their own experience to do whatever their wanted with their own options. Therefore, the followers can develop and grow up. A good leader would open up the opportunity to the followers to make choices and trust them.

This included a leader's learning process of the working environment and the support for an organisation. Another observation is that the need for relationship and autonomy are concerned with the cognitive perception of Transformational leadership. It is the method of social support for freedom of thought and practices. The environment would be related to a leader's performance. Kovjanic et al. (2012) explained the roles of Transformational leadership that the understanding of the followers is necessary. The need for autonomy is first discusses. The fact that leaders asked for opportunity to take part in providing knowledge from the point of view of the followers and explaining it supported their self-creativity. Therefore, they would not feel they are under any control. This is in-line with the concept of Bass (1985) that a leader should respect each individual when considering the followers' comments and taking them into the decision-making process. This is a leader's scheme to support the autonomy of the followers to make a decision and to share their opinions. It is also connected with the groups' objectives that the transformational leader would transform the followers and drove them towards the goals. What is related to Transformational leadership is idealised influence and inspirational motivation. Moreover, the relationship with the need for competence is worth mentioning as the Goal Setting Theory is employed to explain it. A leader set the high level of expectation by increasing the confidence of the followers in the workplace and motivating them to learn. A leader would be taken as the role model of someone with high capabilities. A leader should propose a goal that is challenging to the working performance and facilitate the working environment that fulfillead the follower's

capabilities as expected. With this, what is related to Transformational leadership is the individual consideration, idealised influence and inspirational motivation. Finally, it is the relationship that is relatedness. Transformational leadership helped respond to the building the personal relationship. The job is not only about the personal interest. The individuals understood the identity of society and perspective of the colleagues in the team. This is related with the idealised influence.

The need satisfaction has impacts on the followers as leaders are aware of the goal and did whatever to arrange and distribute the job as appropriate to the expectation of the followers. Giving rewards is the concern. The fact that the Decision-Making Theory employed the needs satisfaction helped explain the individual's growth and development. It is employed to explain the followers' high level of needs. The efficiency of the transformational leader has the impacts to this high level of needs satisfaction as well because the capabilities motivated the followers to be confident and increased the followers' own values. The dimension a leader communicated is the general values that can be interesting and responsive to the followers. This upgraded the followers' perspective of decision-making process when they needed to solve the problems and a number of approaches to positive working performances. A leader is not selfish but tried to cooperate for the common benefit (Kovjanic, Schuh, & Jonas, 2013). According to the classic research of Kovjanic et al. (2012) who cited the concept of Bono and Judge (2003), the relations of Transformational leadership and this theory lead to more efficiency the transformational leader. From the perspective of the followers, the relation between Transformational leadership is the presentation of the relations with the working performance and internal goal rather than external one. The need is described by success and development of human beings as the criterions. For example, need for autonomy is optional. The emotion of this need is not controlled by any special forces but is the form of self-organize. This is related to the followers in that the Transformational leadership helped fulfill their need of competence. The followers then can achieve their goal, as they felt that they have an expertise in something and has an efficient opportunity to implement that very expertise. In addition, the need of relatedness is the presentation of the connection and relations of one's emotion with others. The approaches to study the relations between leadership and expected

outcomes as well as needs in many forms fulfilled the outputs of the followers or the employees. The research findings indicated that normally Transformational leadership influenced certain behaviour; such as job satisfaction, self-competence and commitment with a leader. It meant that the forms a leader can lead the positive outcomes of the employees are numerous. However, the Self-Determination Theory and Transformational leadership did not simply discuss the steps of persuasion under the psychological need. The external influence is also influential. Hence, the Self-Decision Making Theory added the relations to the behavioural outputs of the employees from numerous forms of needs; such as job satisfaction that employed the three forms of mediating variables, self-competence that employed the needs of competence as mediating variables and the commitment with a leader that employed the needs for relationship as the mediating variable. The research findings are presented with the path analysis and indicated that the Self-Decision Making is influential in explaining the behaviour of the employees as influenced by Transformational leadership. Therefore, these findings should be implemented by an organisation. According to Hetland et al. (2011), the needs of a leaders should be estimated that they went in-line with the needs of the followers. Hence, a leader in every position should adapt it to be appropriate to the culture of each society. This has many kinds of impacts on the job satisfaction, incentives and well-being. To have more characteristics of Transformational leadership lead to the explanation of a more positive working performance of an organisation. There is a research conducted with the employees in different occupations in Norway - ranging from high level of leaders in a pharmaceutical company to the employees in company that sold products for health, the television media company, the human resources consultation company, and at the university. It is found that Transformational leadership can fill in the basic gap in terms of needs very well.
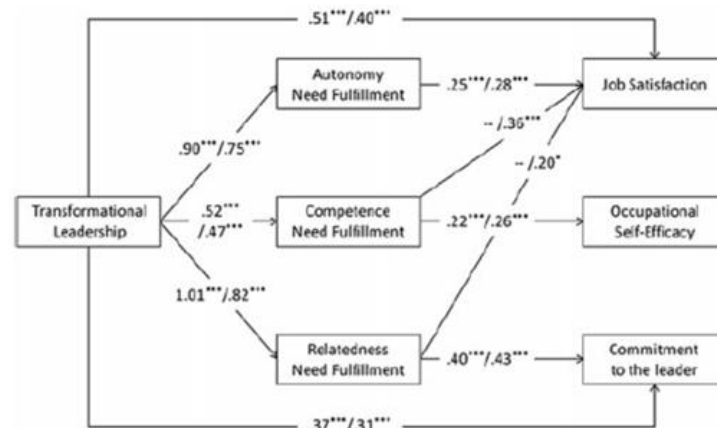
Figure 2.5 Unstandardized path coefficients for the proposed mediation effect.
Source: Kovjanic et al. (2012, p. 1042)

Moreover, Gilbert and Kelloway (2018) discusses research methods in regard to the need for autonomy and incentives that employed a leadership in an educational institution. It is found that Transformational leadership has the implication to persuade the followers with the need for autonomy (freedom to choose). This is the external incentives and internal one that controlled the self-determination. This choice represented the experience from the ability to choose the job the individuals want to do. Autonomy also meant the ability to control the pressure that the individuals has from that job. The ability to control the pressure from the job is external. A leader can employ the method of reward and punishment with the employees. A sensitive leader is not desirable in this case because they would feel guilty when they cannot do according to what the followers needed. It turned out to be that the incentives of independence must come along with regulations. Similarly, internal incentives controlled the behaviour. A leader's behaviour are therefore positive when they are active. They can be negative when they are passive. A leader put these into practice based on their perception and these depended on many characteristics of the followers.

The relations of the Transformational leadership and needs satisfaction of the followers has different dimensions of both variables. The literature presented the relations and suggested that the dimension of the Transformational leadership is the method that caused the outcomes of needs. For example, intellectual stimulation is

what a leader in an organisation needed to be aware of as this enabled the followers to be intellectual. It is not simply the knowledge necessary to solve the problems of an organisation but is also considered the need for competence. The followers needed challenges for their self-improvement (Hart & Thompson, 2007). Next, the need for relativeness is worth mentioning. It focused on a leader who has influence on the thoughts of the followers. The interpersonal relationship in the workplace is built (Kovjanic et al., 2012). The perception of a leader's individual consideration is important in that a leader understood the followers. The latter then are pleased and trusted the decision-making process of the former. This became the cooperative procedures (Hetland et al., 2011). In the workplace, a leader should understand the need of the followers. When there is satisfaction, the followers would perform as indicated by an organisation without considering their own benefit but rather the organizations' (Kovjanic et al., 2013). The relations between both variables, hence, supported the understanding in human resource management. Positive experience is witnessed. Appropriate guidelines and policy are also indicated to employees.

2.12 Conceptual framework

This thesis studies the success of variables that impact an organisation's employees by considering the concepts of leadership in an educational institution as independent factors through the influence of needs satisfaction. This has become a research model that can be applied to a vocational institution using the dual system.

Research literature clarifies the various components, in terms of demography and structure, which contribute to this thesis. The dual system at the vocational colleges in the private sector has been pioneered to benefit the state sector that will launch dual system projects in the future. This dual system originates in Germany and is employed to combine an academic programme and an internship. It allows students to gain knowledge and experience in a real work situation. Leaders and administrators in educational institutions must to be capable of supporting and developing their employees. The variables of the dual system are employed to measure the knowledge of the educational employees and to see whether leadership or administrators contribute to greater understanding.

The educational transformation has impacted the behaviour of employees who bring about changes in terms of the duty and roles of an organisational leader. These paves the way towards planning and introducing the practices that fit within the context of each educational institution. The review of the theory and concepts from research and literature find a relationship for the formulation of a causal model. The theoretical framework includes variables of transformational leadership, instructional leadership, needs satisfaction, trust, organizational commitment, job satisfaction, leader loyalty, and institution loyalty. The research is also concerned with the school structure, dual system criteria, and institute demography with an association to job satisfaction. It is hypothesised that each of these variables have some interplay as shown in the following figure, Figure 2.6;
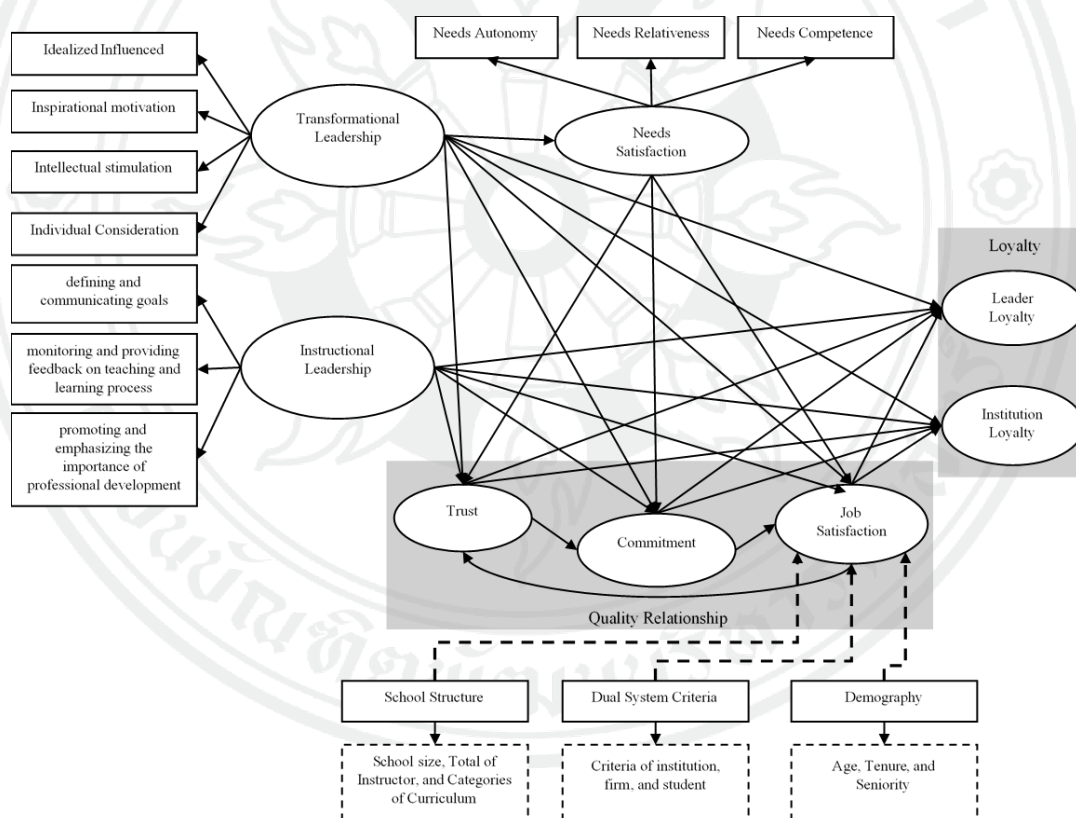
Figure 2.6 The theoretical framework model

Source: Author (2018)

2.13 Conclusion

This chapter summarizes the main literature on the concept of leadership which is categorised as transformational leadership and instructional leadership. Two main characteristics are employed to describe the administrators and heads of departments in vocational colleges and their administrative duties. The relationship of leaders, with impacts on the behaviour of employees and mediating variables, as well as other variables in the educational institutions, have been discussed herein. The overall picture of the chapter is the explanation of the key concerns in regard to the formulation of the main tool that will be utilized in the forthcoming chapters to analyze and answer the research questions.

The framework of this thesis aims to summarize, using the analytical methods, the context of private vocational colleges. These Thai vocational colleges use the dual system. This topic has not been examined and surveyed in Thailand before, nor have these findings been used with the Ministry of Education. This research can thus be considered a pioneer project and its findings can be adapted to the practices of a number of vocational colleges. It is hoped that this thesis can be a model used to improve educational institutions in the future.

CHAPTER 3

METHODOLOGY

3.1 Introduction

The content of this chapter describes the methodology and measurement of variables of transformational leadership (TFL), instructional leadership (ISL), needs satisfaction, organisational commitment, trust, job satisfaction and organisational loyalty. For the vocational instructors in the college who have implemented a dual system, the analysis focuses on the individual level, using quantitative methods. This chapter discusses the survey of sample groups. This thesis, reviews literature and other related research and uses questionnaires distributed to informants as a tool of primary research. Research tools are employed to find concise indicators and measurements of questionnaire interpretations. The hypothesis is formulated upon the results of the questionnaire. This chapter primarily discusses methods of investigation to test the validity and reliability of results.

3.2 Research design

This thesis is descriptive based on survey research appropriate to its quantitative design. The findings confirm both the hypothesis and theories discussed in the previous chapter. Questionnaires are the main tool employed to collect data, the results of which are analysed using basic statistics such as percentages, average number and standard deviation. This chapter employs a confirmatory factor analysis and multiple regression analysis to explain the path analysis, aiming to indicate which path of variables is optimal for administrative functions in an organisation. This chapter also employs structural equation modelling (SEM) to examine leadership and its impacts upon instructor's behaviour in private vocational colleges that have applied a dual system. The analysis aims to answer the research questions and

objectives of this thesis. The hypothesis will be tested with survey and questionnaire results and the literature review.

3.3 Population and sampling

3.3.1 Framework of the survey

The Department of Vocational Education, under the Thai Ministry of Education has helped provide information in regards to the types of the sample and the number of vocational colleges. There are 484 vocational colleges that can be categorised as follows. First, 461 educational institutions have launched the only vocational programmes. Second, vocational colleges that have launched a combination of a general education programme and an Islamic programme number 23. There are eight sub-fields of vocational education; industry, arts, information technology and communication, home economics, business administration, tourism industry, agriculture and fishery. However, private vocational colleges do not include fisheries. Nevertheless, the dual system has already been initiated in the private sector. In this thesis, those that have completed launching the dual system will not be separated from the others that have not. Therefore, this thesis conducts its surveys with the hope to put findings into practice in the future.

The size of the sampling group is 400. The statistical accuracy is $\pm 5\%$ which is considered sufficient and cost effective compared to the sample size. Data has been collected from questionnaires and then interpreted as basic statistics in terms of percentages, averages, and standard deviation. The data must be between 200-500 that it is influential in the analysis of multiple regression, analysis of covariance, and long-linear analysis. The effect size is presented to show that the size of the sample is appropriate in this analysis.

3.3.2 Sampling strategy

The sample of population must be sufficient for the research and statistical power. The method employed in this thesis is, accordingly, method of simple random sampling is employed. Afterwards, purposive sampling is used. For example, the sample of the population includes academic employees in the dual system, deputy

administrators, and vice heads of the department.the. Questionnaires were handed to employees at the community enterprises focussed in this study. The number of questionnaires collected is also indicated. Employees at community enterprises passed the questionnaires to employees based on the number in each section. Afterwards, questionnaires were returned to the researcher. The number of questionnaires collected is related to SEM; each group must have the same number of questionnaires so that the variance rate is not too high or too low. The appropriate number of samples, therefore must be more than 200 Also, the parameter estimation uses the method of maximum likelihood (Lindeman, Merenda, & Gold, 1980) which is used for multivariate analysis, which surmises that there must be ten times higher than the number of samples from observable variables – and there are eight latent variables. For this SEM, 5-10 participants are required for each parameter requiring one estimation (Hair, Anderson, Tatham, & Black, 1998). After calculation, there were 80-160 examples. The appropriate number of samples then should be 200 or more.

Private vocational institutions with dual systems are under the supervision of the Department of Vocational Education, Ministry of Education. Yet, there are 168 from 484 vocational institutions that pass the criteria and therefore, data collection of the academic employees and the deputy heads of the departments took place in all locations. Information in regard names, size of the groups and samples of the questionnaires contributes to the analysis. The researcher has also submitted a letter of recommendation, approved by the Department of Vocational Education and the National Institution of Development Administration (NIDA), to explain the objectives of this research.

3.4   Evaluation of measures

The tools employed in this thesis are numerous and found in range of research. This aims at reducing the chance of errors that might be caused when the researcher resorts to only one single tool. Tools have been selected to reduce confusion in the questionnaires and discriminatory values that might occur in measurements. Therefore, the validity and reliability must be measured and confirmed.

3.4.1   An evaluation of validity

is employed to reduce the risk of inter-relations among variables and bias in the evaluation. Reliability has been searched with the methods of examination, survey, observation and literature review.

3.4.1.1   Content validity

Content validity surveys the empirical measurement of items and indicators. The measurement covers sufficient phenomena. The content of measurement use translation-back translation procedure method by translate from original language to local language and back to original language for consistency (Brislin, (1980) Translation and content analysis of oral and written material. In: Brislin, 1980). In this research, there are five methods of measurements in regards to leadership at vocational college; needs satisfaction, quality of relationships and loyalty. The measurement of content validity is necessary as the researcher needs to understand the literature and reviews of other related research, as well as the methodology and tools. Measurements of content were adapted after completing the literature review.

3.4.1.2   Construct validity

Construct validity is the study of sub-concepts in-line with the thesis structure and theories. The method of factor analysis is employed to measure variables, in order, to test their relationships and the size of their components. This analysis leads to a new dimension of factor analysis, as a confirmatory factor is also be employed. The minimum loss of information has been used to develop the tools of measurement; such as leadership in the vocational institution, satisfactory, quality of relationship and loyalty.

3.4.1.3   Logical validity

Logical validity – or face validity – is the verification process by experts. Once the evaluation is completed, inappropriate words will be eliminated from each topic. More appropriate words will be added to the sentences, as suggested by the experts.

3.4.1.4   Criteria related validity

Criteria related validity is the question asked after the correlation coefficient of more than 0.7 is calculated. Each variable will be measured and explained in the section on the evaluation of reliability.

3.4.2 The evaluation of reliability

The evaluation of reliability is a technique used to measure the coherence of the questionnaires with the literature review. By employing the Cronbach's Alpha Coefficient, it is expected that the measurement of the questionnaires must be in the same direction with the internal consistency reliability. The measurement of Likert is used with at least three questions. The correlation coefficients are set up as equal or more than 0.7 (Hair, Black, Babin, & Anderson, 2009) or at least 0.6 (Nunnally, 1967). This result is considered a satisfactory one. Approximately 30 copies of the surveys should be handed over as pilot-test during the initial stages as art of an evaluation of the questionnaires.

Table 3.1 Variables and Cronbach's alpha from pre-test Analysis

	Variable	number of questions	officer in dual system
Transformational	Idealized influenced	8	0.781
leadership	Inspirational motivation	3	0.664
	Intellectual Stimulation	4	0.791
	Individual consideration	4	0.787
Instructional	Promotes school-wide.	7	0.687
leadership	Defines and communicate.	8	0.804
	Monitors and provides	8	0.800
Needs	Needs competency	3	0.753
Satisfaction	Needs Relative	3	0.707
	Needs competency	3	0.787
Quality relationship	Trust	4	0.720
	Commitment	14	0.805
	Job satisfaction	14	0.788

	Variable	number of questions	officer in dual system
Loyalty	Leader loyalty	8	0.813
	Organization loyalty	4	0.845

3.5 Operational definitions and measurements

Based on the hypothesis of this thesis and its theoretical framework, there is a set of variables in regard to leadership in the educational institutions, needs satisfaction, relationship quality and loyalty that have been summarized from relevant literature and related research. All are indicated in the table as follows;

Table 3.2 Operational definitions and measurements

1. Transformational leadership is what describes a leader who can persuade employees to perform their best so that the organisational goals are achieved. The demands of the employees are likewise understood and their goals are achieved. The vocational institution needs to support the campaign for its self-improvement and reorganisation, according to the context of change.

Variable		Questionnaire	source
Idealised influenced	1	ผู้บริหาร อธิบายชัดเจนเกี่ยวค่านิยมหรือพันธกิจของสถานศึกษา ที่เกี่ยวข้องกับแนวทางของทวิภาคี The administrative team has clearly explained the values or missions of your vocational institution that are related to concepts of dual system.	(Ariyabuddhiphongs and Kahn (2017); Bass and Avolio (1995); Shih et al. (2012))
	2	ผู้บริหาร อธิบายให้ทราบเหตุผลว่าระบบทวิภาคีควรสอดคล้อง กับวัตถุประสงค์ที่สถานศึกษากำหนด The administrative team has given reasons of why the dual system should be aligned with set objectives of the vocational institution.	
	3	ผู้บริหาร ตัดสินใจสถานการณ์อย่างเป็นขั้นตอนด้วยความเป็น ธรรมหรือยึดมั่นในศีลธรรมอันดี The administrative team has made any reasonable and logical judgments based on good morals	
	4	ผู้บริหาร รับรู้และให้ความสำคัญกับพันธกิจที่กลุ่มที่ต้องนำไป ประยุกต์ใช้กับระบบทวิภาคีในสถานศึกษา	

Variable		Questionnaire	source
		The administrative team has acknowledged and pay more attention to the institution's missions which allow their applications to the dual system of the institution.	
	5	ผู้บริหาร ทำให้ท่านรู้สึกภาคภูมิใจเมื่อได้ทำงานร่วมกัน	
		The administrative team makes you feel proud when working together	
	6	ผู้บริหาร เล็งเห็นประโยชน์ส่วนรวมที่จะได้รับมากกว่าประโยชน์ส่วนตนในสถานศึกษา	
		The administrative team focuses on collective gains rather than those of the individuals	
	7	ผู้บริหาร สร้างความนับถือให้กับท่านเมื่อร่วมทำงานด้วยกัน	
		You have your respect for the administrative team when working together	
	8	ผู้บริหาร แสดงออกถึงพลังและความมั่นใจในการทำงานในการขับเคลื่อนระบบทวิภาคีเข้ามาใช้ในสถานศึกษา	
		The administrative team has shown their energy and pride when working to integrate the dual system in your institution	
Inspirational motivation	9	ผู้บริหาร มีความกระตือรือร้นที่จะทำงานของสถานศึกษาให้สอดคล้องกับระบบทวิภาคีให้มีความสมบูรณ์แบบ	
		The administrative team is energetic in fulfilling gaps towards a complete dual system in your institution	
	10	ผู้บริหาร เชื่อมโยงวิสัยทัศน์สถานศึกษาให้ท่านรู้สึกสนใจที่จะร่วมมือเพื่อปรับใช้แนวทางทวิภาคีกับสถานศึกษาให้สัมฤทธิ์ผล	
		The administrative team has gained your attention to help them by linking missions of the institution with the dual system to reach the institutional goals	
	11	ผู้บริหาร แสดงออกให้ท่านมั่นใจว่าสามารถดำเนินงานทำตามแนวทางทวิภาคีได้สำเร็จอย่างแน่นอน	
		The administrative team has shown confidence that the team can accomplish the works according to the concepts of the dual system.	
Intellectual stimulation	12	ผู้บริหาร วิเคราะห์ประเด็นเมื่อมีปัญหาหรือสถานการณ์เกี่ยวกับระบบทวิภาคีที่ส่งผลต่อสถานศึกษาได้อย่างถี่ถ้วน	
		The administrative team has been able to analyze and think thoroughly when any controversies or problems regarding the dual system occur	
	13	ผู้บริหาร มีวิธีการแก้ไขปัญหาของระบบทวิภาคีในสถานศึกษาที่ได้ผลลัพธ์ที่ดีกว่าวิธีแก้ไขปัญหาทั่วไป	
		The administrative team has had better solutions for controversies or problems regarding the dual system than for those regular ones.	
	14	ผู้บริหาร ปลูกฝังให้ท่านรู้จักใช้ตระหนักถึงวิธีในการแก้ไขปัญหาของระบบทวิภาคีได้ตามสถานการณ์	

Variable		Questionnaire	source
		The administrative team has made you aware of the contextual solutions of each dual system's problem.	
	15	ผู้บริหาร แนะนำมุมมองเมื่อระบบทวิภาคีเข้ามาในระบบทำงานของสถานศึกษาให้แก่ท่านเสมอเพื่อให้งานที่ได้รับมอบหมายนั้นลุล่วงไปด้วยดี	
		The administrative team has always suggested some guidelines of the dual system to you so that any given works will be done properly	
Individual consideration	16	ผู้บริหาร ใช้เวลาสอนหรือฝึกฝนท่านให้เชี่ยวชาญในงานที่ทำหรืองานที่ไม่เคยทำมาก่อนกับระบบทวิภาคี	
		The administrative team has spent time to train you on current responsibilities or new responsibilities regarding the dual system	
	17	ผู้บริหาร ทำงานร่วมกับท่านด้วยความเป็นกันเอง มากกว่าการคิดว่าท่านเป็นสมาชิกในกลุ่มเท่านั้น	
		The administrative team is always being friendly with you	
	18	ผู้บริหาร คอยสำรวจบุคลากรที่ทำงานร่วมกันในระบบทวิภาคีว่ามีความต้องการที่แตกต่างกันในกลุ่มการทำงานปกติ	
		The administrative team has always focus on individuals' needs	
	19	ผู้บริหาร ช่วยเหลือท่านในการหาความถนัดในหน้าที่การงานของท่านเมื่อมีการจัดการเรียนการสอนด้วยระบบทวิภาคีในสถานศึกษา	
		The administrative team has supported you to realize your strengths and potentials when teaching in the dual system in your institution	

2. Instructional leadership is very important so that the educational results and academic growth of the students are achieved. The academic employees, persuaded by the leaders, are the key actors in making this possible. The instructional leaders must be able explain the vision and mission of the educational institution with activities, monitoring and appraisal process. The results will be used to support the performance of the educational institution.

Variable		Questionnaire	Source
Promotes school-wide professional development	20	ผู้บริหาร สนับสนุนผู้สอนให้สนใจการพัฒนาอาชีพต่อเนื่องตามเป้าหมายที่ได้กำหนดไว้ในสถานศึกษาที่เป็นระบบทวิภาคี	(Alig-Mielcarek and Hoy (2005); Dutta and Sahney (2016); V. M. J. Robinson, Lloyd, and Rowe (2008))
		The administrative team has supported professional development for instructors to reach the institution's missions in becoming a vocational institution using the dual system	
	21	ผู้บริหาร เพิ่มโอกาสในการพัฒนาอาชีพด้วยการจัดอบรมภายในเพื่อให้มีการพัฒนาหลักสูตรการเรียนการสอนที่ดีและสอดคล้อง	

Variable	Questionnaire		Source
		กับระบบทวิภาคี	
		The administrative team has provided more opportunities to you in professional development by offering internal training programs for effective teaching-learning environment in relation to the dual system	
	22	ผู้บริหาร วางแผนพัฒนาผู้สอนให้เป็นไปตามระบบทวิภาคีและ ความต้องการผู้สอนเองในการปฏิบัติกิจกรรมของสถานศึกษา	
		The administrative team has set professional development plans for instructors and to which they suit the instructors' needs.	
	23	สถานศึกษามีแผนพัฒนารายบุคคลให้มีการสนับสนุน ความก้าวหน้าในอาชีพ	
		The institution has customized its professional development plans for each instructor.	
	24	สถานศึกษามีความพร้อมเพื่อส่งเสริมผู้สอนสู่แผนพัฒนาอาชีพ	
		The institution is ready to support their instructors in any professional development aspects.	
	25	สถานศึกษามีความพร้อมในการจัดสรรทรัพยากรและเครื่องมือ ที่พร้อมที่มีประโยชน์ต่อก้าวหน้าทางอาชีพตามระบบทวิภาคี เช่น ระบบข้อมูลวิจัย สื่อการเรียนการสอน หรือความพร้อมของ บุคลากรด้านต่าง ๆ	
		The institution is ready to provide useful resources and tools towards professional development of its instructors according to the dual system, such as research data system; teaching and learning materials; or qualifying supporting staff	
	26	ผู้บริหารมีการกำหนดแผนที่ชัดเจนในการร่วมมือกับผู้สอนเพื่อ พัฒนาอาชีพตามหลักสูตรทวิภาคีที่กำหนดไว้	
		The administrative team has set clear plans in collaboration with instructors to involving with professional development according to the set dual system.	
Defines and communicates shared goals	27	การพิจารณาหลักสูตรตามระบบวิภาคีในแต่ละครั้งมีการใช้ ข้อมูลในชั้นเรียนหรือกิจกรรมเพื่อนำไปปรับปรุงผลสัมฤทธิ์ ของผู้เรียนให้ดีขึ้น	
		In assessing qualities of the programs in the dual system, the administrative team has based them on in-class and out-of-class activities to efficiently improve learners' qualities.	
	28	ผู้บริหารส่งเสริมให้รู้จักใช้ข้อมูลสารสนเทศเพื่อความก้าวหน้า ทางวิชาการของผู้เรียนในระบบทวิภาคี	
		The administrative team has supported learners to gain knowledge and how to use informational technology to further the learners' academic skills in the dual system.	

Variable	Questionnaire	Source
	29 ผู้บริหารมีการร่วมมือกับผู้สอนเพื่อให้บรรลุเป้าหมาย สถานศึกษา ด้วยการพัฒนาข้อมูลวิชาการให้เข้าถึงบุคลากรทุก ภาคส่วนและระบบทวิภาคี The administrative team has collaborated with the instructors to reach the institution goals by providing staff access to research database and that of the dual system.	
	30 มีกระบวนการสื่อสารภายในสถานศึกษาให้เข้าใจชัดเจนถึง เป้าหมายทางวิชาการที่ต้องสอดคล้องกับระบบทวิภาคี There are clear communication processes in the institution to allow staff to fully understand academic goals of the institution which are aligned with the dual system.	
	31 ผู้บริหารร่วมมือกับผู้สอนในการเอื้ออำนวยข้อมูลการประเมิน ตามสาขาวิชาที่มีการจัดศึกษาทวิภาคีเพื่อนำผลลัพธ์ไปพัฒนา สถานศึกษา The administrative team has collaborated with the instructors in providing inputs for assessing qualities or each program under the dual system. This is for the results to be use in the institution's development.	
	32 ผู้บริหารมีการยกระดับทางการศึกษาอย่างต่อเนื่องเพื่อให้เป็นไป ตามความคาดหวังของผู้เรียนที่อยู่ภายในระบบทวิภาคี The administrative team always has its respect towards the institution's goals when the team needs to make decisions about academic issues, programs, and the dual system.	
	33 ผู้บริหารมีการยกระดับทางการศึกษาอย่างต่อเนื่องเพื่อให้เป็นไป ตามความคาดหวังของผู้เรียนที่อยู่ภายในระบบทวิภาคี The administrative team has made its constant progress in managing the vocational education under the dual system. This is to serve the learners' expectations.	
	34 เกณฑ์การประเมินความสำเร็จของผู้เรียนอยู่ในระดับที่สูงขึ้น อย่างต่อเนื่อง The learner assessment level has been in great quality.	
Monitors and provides feedback	35 ผู้บริหารมีการเยี่ยมชมการเรียนการสอนในชั้นเรียนหรือสถาน ประกอบการเป็นบางครั้ง เพื่อให้มั่นใจว่าเป็นไปตามหลักสูตร ทวิภาคี The administrative team has occasionally observed the classrooms or the companies the learners have been accepted to work for. This is to be certain that both classroom management as well as the organizations are following the structures of the dual system.	

Variable	Questionnaire	Source
	36 ผู้บริหารมีส่วนร่วมในการตรวจสอบแนวปฏิบัติในชั้นเรียนหรือ สถานประกอบการว่าเป็นไปตามข้อกำหนดและระบบทวิภาคี 36. The administrative team has involved in inspections of classroom or organization practices to make sure that every activity is aligned with programs' regulations and those of the dual system	
	37 ผู้บริหารทำงานด้านวิชาการร่วมกับผู้เรียน เช่น การประกวด แข่งขันวิชาการภายใน ทัศนศึกษาด้านวิชาการ หรือการสอบ ประเมินความรู้ทั่วประเทศ เป็นต้น The administrative team has collaborated with the learners, such as academic competitions; academic field trips; or national academic assessments.	
	38 ผู้บริหารใช้เวลาทำงานในสถานศึกษาเป็นส่วนมาก The administrative team has usually spent time working on campus.	
	39 ผู้บริหารให้ความสำคัญแผนพัฒนาผู้สอน โดยให้ผู้สอนปรับตัว เข้ากับทวิภาคีอย่างเหมาะสมมากกว่าประเมินให้ผู้สอนเป็นไป ตามเกณฑ์ระบบทวิภาคี The administrative team has paid more attention to the importance of the instructors' development plans. The instructors are allowed to adjust themselves to the dual system properly and not just that they can follow the regulations of such system.	
	40 การประเมินผู้สอนเพื่อมุ่งเน้นให้เกิดการพัฒนาในหลักสูตร วิชาการตามระบบทวิภาคี The instructors' assessments have been performed to develop the programs according to the dual system.	
	41 เมื่อผู้สอนมุ่งมั่นในการทำงานให้บรรลุผล ผู้บริหารมักมีผลตอบ รับ เช่น ประเมินเกณฑ์ที่ดี คำชมเชยหรือผลตอบแทน เป็นต้น When the instructors have achieved their goals, the administrative team has always reacted positively, such as giving them positive assessments, paying them compliments, or providing some incentives.	
	42 เมื่อผู้เรียนมีความพยายามในการศึกษาจนสัมฤทธิ์ผล ผู้บริหาร มักมีผลตอบรับ เช่น การชมเชย การยกให้เป็นแบบอย่างที่ดี หรือ ทุนการศึกษา เป็นต้น When the learners have reached their academic goals, the administrative team has always reacted positively, such as paying them compliments, honoring them as excellent students or providing them some scholarships.	

3. Needs satisfaction is one of the fundamental needs of human being, according to

self-determination theory. As human beings have different needs, the organisation must acknowledge the differences in order to persuade the employees and lead them towards the direction that can benefit the organisation appropriate to the level of competence.

Variable		Questionnaire	Source
	43	ท่านรู้สึกอิสระในการแสดงออกถึงความเป็นตัวเองในการทำงาน อย่างการทำงานได้เองโดยที่ไม่มีผู้ใดมาควบคุมหรือบังคับในงาน ที่ได้รับมอบหมาย หรือมีแนวทางเป็นของตนเองในการทำให้ หลักสูตรทวิภาคีที่ปรับเข้ากับแบบปกติ	(Kovjanic et al. (2012); J. La Guardia et al. (2000))
		You feel comfortable in being yourself at work. You can exhibit initiatives at work in completing your given tasks that would be aligned with the dual system or without having to have someone control you.	
	44	ท่านรู้สึกว่าท่านเป็นคนมีความสามารถ สมรรถนะ ความรู้และ ทักษะในการทำงานในระบบทวิภาคี	
		You feel that you have abilities, competencies, knowledge, and skills in working under the dual system.	
	45	ท่านรู้สึกเห็นใจ ห่วงใยและมีเข้าใจในการทำงานร่วมกันในระบบ ทวิภาคี	
		You have empathy, sympathize, and understand the process of collaboration in the dual system.	
	46	ท่านรู้สึกว่าไร้ความสามารถหรือไม่ดีพอเมื่อทำงานเกี่ยวกับระบบ ทวิภาคี	
		You feel that you do not possess any ability or are not good at any working activities when it comes to working under the dual system.	
	47	ท่านสามารถพูดได้เสมอเมื่อมีปัญหาหรือเหตุการณ์สำคัญที่เป็น อุปสรรคในการทำงานของระบบทวิภาคี ท่านสามารถออก ความเห็นเพื่อเสนอการแก้ไขปัญหานั้นได้	
		You can always give suggestions when any problems or important obstacles arisen in working under the dual system.	
	48	ท่านรู้สึกว่ามีระยะห่างในความสัมพันธ์ระหว่างผู้บริหารใน ระหว่างการทำงานภายใต้ระบบทวิภาคี	
		You feel a great distance when working with the administrative team under the dual system.	
	49	ท่านรู้สึกมีศักยภาพและมีประสิทธิภาพในการทำงานภายใต้ ระบบทวิภาคี	
		You feel that you have potentials and efficiency in working under the dual system.	
	50	ท่านมีความสนิทสนมและคุ้นเคยกับการทำงานร่วมกับผู้บริหาร ในสถานศึกษาอาชีวศึกษา ภายใต้ระบบทวิภาคี	

Variable	Questionnaire	Source
	You are close to the administrative team in your institution and are familiar with collaborations with other administrative teams in other vocational institutions under the dual system.	
51	ท่านรู้สึกว่าการทำงานภายใต้ระบบทวิภาคีแต่ละครั้งท่านได้รับแรงกดดันและถูกบังคับให้ทำงานให้เป็นไปตามทิศทางของผู้บริหารมากกว่าสร้างสรรค์ให้เหมาะสมด้วยความคิดของตนเอง	
	You feel that in working under the dual system you have a lot of pressure and are forced to work according to the administrative team rather than using your creative thoughts in completing your assigned tasks.	

4. Trust is the internal feeling of an individual that occurs as a result of more than two people's interactions. It is also a reciprocal expectation that can lead to either a growing relationship or a damaged one, if a party changes its behaviour in a way that exploits the other.

Variable	Questionnaire	Source
52	ท่านคาดหวังว่าผู้บริหารจะทำงานร่วมกับท่านไปในทิศทางเดียวกันและคาดการณ์ได้ว่าผลลัพธ์การทำงานร่วมกันภายในสถานศึกษาต้องสำเร็จอย่างที่ตั้งใจไว้	(Ariyabuddhiphongs and Kahn (2017); S. L. Robinson (1996))
	You expect that the administrative team will work together with you in the same direction and the success will be achieved through the collaboration.	
53	ท่านเชื่อว่าผู้บริหารมีแรงจูงใจและความตั้งใจที่ดีในการปฏิบัติงานในสถานศึกษาร่วมกับทุกคนในทีม	
	You believe that the administrative team has motivations and good intentions in collaboration with every staff member.	
54	ท่านไม่คิดว่าผู้บริหารปฏิบัติกับท่านค่อนข้างลำเอียงกับผู้อื่นที่ทำงานร่วมกัน	
	You do not think that the administrative team is biased against you or other staff members who work together.	
55	ท่านรู้สึกว่าผู้บริหารเป็นคนเปิดเผยและเป็นคนทำงานจริง	
	You feel that the administrative team is sincere and determined.	

5. Job satisfaction is the experience from work and psychological responses that depend on contextual desires. Job satisfaction may result from other peoples' evaluations that affect a person. The evaluation is based on their attitudes, values and experiences.

Variable	Questionnaire	Source
56	ท่านรู้สึกรักในงานที่ท่านทำอยู่ในปัจจุบัน	(Houtte (2006); P. C. Smith, Kendall,
	You feel that you love the job the you are	

Variable		Questionnaire	Source
		currently doing.	and Hulin (1969); Vaughn and Dunn (1974))
	57	ท่านรู้สึกว่างานที่ทำเป็นงานประจำที่เหมือนเดิมทุกวัน	
		You feel that the work you do every day is tedious.	
	58	ท่านรู้สึกพึงพอใจในงานที่ท่านทำ	
		You feel satisfied with the work you have done.	
	59	ท่านคิดว่างานที่ทำเป็นงานที่ดีงานหนึ่ง	
		You think that your current job is good.	
	60	ท่านคิดว่างานที่ทำเป็นงานที่สร้างสรรค์	
		You think that your current job is a creative job.	
	61	ท่านรู้สึกว่างานที่ท่านทำมีความน่าเคารพ	
		You feel that your current job is respectful.	
	62	ท่านรู้สึกว่างานที่ท่านทำเป็นที่นิยมในตลาดแรงงานในขณะนี้	
		You feel that your current job is popular in the labor market.	
	63	ท่านรู้สึกเพลิดเพลินตลอดเวลากับงานที่ท่านทำปัจจุบัน	
		You enjoy working at your current job.	
	64	ท่านคิดว่างานที่ท่านทำมีประโยชน์ต่อตนเองและผู้อื่น	
		You think that your job contributes to many other people and yourself.	
	65	ท่านรู้สึกว่างานที่ทำอยู่สามารถทำให้ท่านเจริญรุ่งเรืองได้	
		You feel that your current job enables to you gain prosperity and promotion.	
	66	ท่านรู้สึกว่างานมีความท้าทายสำหรับท่าน	
		You feel that your current job is challenging.	
	67	ท่านรู้สึกว่างานที่ท่านทำต้องใช้ไหวพริบในการจัดการ	
		You feel that your current job requires intelligence in managing works and responsibilities.	
	68	ท่านรู้สึกว่างานที่ทำนั้นง่ายไม่มีอะไรซับซ้อน	
		You feel that your current job is simple.	
	69	ท่านรู้สึกว่างานที่ทำน่าจะนำพาท่านไปสู่ความสำเร็จในชีวิต	
		You feel that your current job will lead you to have a success in life.	

6. Organisational commitment is referred to the interrelationship between individuals and the organisation. The organisation drives an individual to feel that they are its member. The benefit to the organisation is also their own benefit. This varies according to the values and the beliefs the organisation wants to impart to the employee.

Variable	Questionnaire	source

Variable		Questionnaire	source
	70	ท่านยินดีที่จะอุทิศตนในการทำงานที่สถานศึกษาแห่งนี้ มากกว่าประโยชน์ส่วนตนเพื่อให้สถานศึกษาอาชีวศึกษาแห่ง นี้เป็นต้นแบบของการใช้หลักสูตรทวิภาคี ที่ประสบ ความสำเร็จ You feel good to contribute more to your institution than to your own pleasure. This is for your institution to become a prototype of the dual system.	(Angle & Perry, 1981; R. T. Mowday, Steers, and Porter (1979); Sayadi (2016))
	71	ท่านมักจะคุยกับเพื่อนว่าสถานศึกษาแห่งนี้เหมาะสมอย่างยิ่ง ต่อการทำงานในสายอาชีพครู You always talk to your colleagues in this institution that it is great to work as a teacher here.	
	72	ท่านรู้สึกมีความจงรักภักดีในระดับที่พอประมาณต่อ สถานศึกษาที่ดำเนินงานด้วยระบบทวิภาคีแห่งนี้ You have quite a loyalty to this institution when it is under the dual system.	
	73	ท่านไม่เกี่ยงงานที่ได้รับมอบหมายและพร้อมทำงานให้สำเร็จ ตามที่สถานศึกษากำหนดไว้ เช่น การจัดทำหลักสูตรทวิภาคี ภาระงานนอกเหนืองานสอน งานล่วงเวลา หรือการเข้าเวร ให้กับสถานศึกษา เป็นต้น You always welcome any given responsibilities and ready to complete them according to the institution's goals, such as the dual system setup; extra work apart from teaching loads; overtime works; or shift rotating.	
	74	ท่านรับรู้ได้ว่าค่านิยมของท่านและสถานศึกษาไม่แตกต่างกัน เสมือนมีเป้าหมายในการทำงานแบบเดียวกัน You acknowledge that your values and those of the institution are alike, just as both have the same work focus.	
	75	ท่านยินดีที่จะบอกผู้อื่นเสมอว่าท่านเป็นส่วนหนึ่งที่มีบทบาท สำคัญต่อสถานศึกษาอาชีวศึกษาแห่งนี้ You feel good to tell other people that you are an important part of this institution.	
	76	ท่านคิดว่าสามารถทำงานได้สำเร็จโดยไม่จำกัดว่าต้องทำงาน กับสถานศึกษาแห่งนี้ ตราบเท่าที่ประเภทของงานเป็นแบบ เดียวกัน You think that you can work successfully anywhere under the condition that the type of job is the same.	
	77	ท่านรู้ว่าการเปลี่ยนแปลงบทบาทการทำงานมีโอกาสน้อยมาก ที่ทำให้ท่านต้องการลาออกจากสถานศึกษา You know that changing work roles is not the reason for you to resign.	
	78	ท่านปลาบปลื้มและภูมิใจอย่างมากที่ท่านได้มาทำงาน ณ	

Variable	Questionnaire	source
	สถานศึกษาแห่งนี้ มากกว่าการทำงานแห่งอื่น	
	You feel better and prouder when you work here and not at any other workplace.	
79	ท่านรู้สึกว่าไม่ค่อยมีเงื่อนไขใดที่ผูกมัดท่านให้เกิดการทำงาน ที่สถานศึกษาแห่งนี้นานขึ้น	
	You feel that there is no obligation for you to work longer at this institution.	
80	ท่านเห็นด้วยกับนโยบายที่ให้ความสำคัญต่อบุคลากรใน สถานศึกษาแห่งนี้ เช่น นโยบายค่าตอบแทน นโยบายการ พัฒนาทรัพยากรมนุษย์ หรือ นโยบายอัตรากำลังคน เป็นต้น	
	You agree with the institution policy that pay extra care to its staff, such as incentive policy; Human Resources development policy; or staff ratio policy	
81	ท่านใส่ใจต่อความศรัทธาที่มีให้สถานศึกษาแห่งนี้ เช่น ท่าน เชื่อว่าวิสัยทัศน์ของสถานศึกษาแห่งนี้จะนำพาบุคลากรและ ผู้เรียนไปสู่ความสำเร็จ หรือ ผลสำเร็จของสถานศึกษาก็คือ ผลสำเร็จของบุคลากรทุกคน	
	You have faith in this institution. For instance, you believe that the institution will lead its staff and learners toward success. Or, the success of this institution is the success of every staff members.	
82	ท่านรู้สึกว่าท่านได้รับโอกาสที่ดีที่สุดในชีวิตที่ทำงานเพื่อ สถานศึกษาแห่งนี้	
	You feel that you gain the best opportunity in working for this institution.	
83	ท่านคิดว่าการที่ท่านเลือกทำงานที่สถานศึกษาอาชีวศึกษาแห่ง นี้คือความผิดพลาดที่ท่านต้องการแก้ไข	
	You think that your choice in working at this vocational institution is considered your failure and you need to fix it.	

7. Leader loyalty is the relationship between employees and the administrators based on a sense of belongingness in the organisation. Leaders expect their employees to put their best effort into their job and have a positive mindset towards the organisation.

Variable	Questionnaire	Source
84	ท่านคิดว่าผลสัมฤทธิ์ทางการศึกษาที่ท่านทำร่วมกับผู้บริหารเป็น ความสำเร็จจากความร่วมมือของทั้งสองฝ่ายภายใต้ระบบทวิภาคี	(Cheng, Jiang, and Riley (2003); Jiang and Cheng (2008))
	You think that the academic success gained is because of the collaboration between you and your administrative team under the dual system.	
85	ท่านชื่นชมความสำเร็จของสถานศึกษาในการจัดการหลักสูตรทวิ ภาคีให้มิตรสหายฟังว่ามาจากฝีมือของผู้บริหารด้วยความ ภาคภูมิใจ	

Variable	Questionnaire	Source
	You praise the institution's success in managing the dual system. When you meet your colleagues or friends, you usually say that such a success has come from the administrative team.	
86	ท่านรู้สึกเหมือนได้รับคำชมเชยเมื่อคนภายนอกชมผู้บริหาร	
	You feel that you are given compliments when other people from other workplaces praise your administrative team.	
87	ท่านรู้สึกว่าค่านิยมร่วมระหว่างท่านกับผู้บริหาร เกิดตั้งแต่เมื่อ ท่านเริ่มทำงานที่สถานศึกษาแห่งนี้	
	You feel that you have had co-values between you and your administrative team from the day you started to work at this institution.	
88	ท่านเคารพในผู้บริหารเพราะมั่นคงในอุดมการณ์	
	You have respected your administrative team because of the determination and goal-oriented visions.	
89	ท่านได้รับอำนาจในการทำงานในหลักสูตรทวิภาคี โดยที่ ผู้บริหารหรือหัวหน้างานของท่านไม่ต้องคอยกังวล	
	You are authorized to work in the dual system without any monitoring from your administrative team or your direct boss.	
90	ท่านรู้ว่าท่านทำงานได้อย่างดีเยี่ยมและมีประสิทธิภาพตามการ ทำงานที่ควรทำตามบทบาทของผู้ใต้บังคับบัญชา	
	You know that you can work excellently and effectively as a subordinate.	
91	ท่านยินดีที่จะใช้ความพยายามทุกอย่างเพื่อให้งานที่ได้รับ มอบหมายจากผู้บริหารหรือหัวหน้านั้นสำเร็จลุล่วงไปด้วยดี	
	You feel good to try every way possible to make your assigned tasks from your administrative team or your direct boss a success.	

8. Organisation loyalty is the interrelationship between the employee and the organisation, built from a sense of belongingness. The organisation expects its employees be loyal and put their best effort into their jobs and display a positive mindset towards the organisation.

Variable	Questionnaire	source
92	เมื่อท่านนึกถึงการทำงานด้านวิชาการหรือการสอนที่เกี่ยวกับทวิ ภาคี ท่านจะนึกถึงสถานศึกษาแห่งนี้เป็นแห่งแรกในการทำงาน	(Ting & Yeh, 2014)
	When you think of academic works or teaching about the dual system, you will always think of this institution.	
93	ท่านชื่นชมสถานศึกษาของท่านให้บุคคลทั้งภายในและภายนอก ฟังอยู่เสมอ	
	You always praise your institution when you talk to internal staff and also other people outside of the	

Variable	Questionnaire	source
	institution.	
94	ท่านยินดีที่จะแนะนำสถานศึกษาที่ท่านทำงานอยู่ให้ผู้ที่ท่านเห็น ความสามารถมาร่วมงานในสถานศึกษาแห่งเดียวกัน	
	You feel good to suggest and persuade other qualified people to work at this institution.	
95	ท่านส่งเสริมให้ผู้เรียนหรือบุคคลที่สนใจมาศึกษาต่อที่สถานศึกษา ที่ท่านทำงานอยู่	
	You feel good to suggest and persuade interested or prospective students to study at this institution.	

3.6 Data collection procedure

This thesis employs quantitative methods and uses questionnaires to collect data. The variables employed in the questionnaires have been selected from the literature review. The first part of the questionnaire measures knowledge of the dual system and the educational structure. Here, the measurement of multiple choices was employed. The following part measure demographic conditions. The factors employed in this thesis is transformational leadership, needs satisfaction, trust, job satisfaction, organisational commitment and loyalty. The measurement of the Likert scale is employed with the number from 1 to 5 marking the difference. For example, 1 means 'absolutely disagree', 2 could be interpreted as 'disagree', and 3 shows a hesitation to agree or disagree. In addition, 4 is referred to 'quite agree', and 5 means 'extremely agree'.

The questionnaires were distributed via the post office and online so that all groups of employees at private vocational institutions with dual systems were covered. The researcher requested that informants answer the questions in the questionnaires and communicated that all information would be confidential. The recommendation letter granted by the Department of Vocational Education and the National Institution of Development Administration (NIDA) were also attached to the questionnaires. The informants must have been willing to take part in this research, so the information would be used in the analysis. It must be noted that the researcher requested permission from executives of a number of vocational institutions.

The research design and procedures have accordingly been informed. The tools in regards to information technology was adapted to the different context of the

vocational institutions. Educational employees have been asked to cooperate by returning the questionnaires to the researcher. From time to time, the researcher had to contact employees who agreed to facilitate the research that was conducted from January to June 2019.

3.7   Data analysis for quantitative techniques

When the researcher had collected all data from the private vocational institutions with dual systems, the information from questionnaires was then analyzed. Therefore, the raw data was transformed into information. The statistics were calculated with SPSS for Windows statistical; a package for the Social Science and AMOS programme to look for Structural Equation Modelling (SEM).

The tools used in this research include SEM which is used to explain variables. Techniques that have been used in this thesis include a factor analysis and a multiple regression analysis (Hair et al., 2009). There are numerous benefits of SEM that can be described as follows (Bagozzi & Yi, 2012). First, SEM is appropriate for analyzing variables and relationships in the model of leadership at an educational institution that could impact its employees. In addition, the relationships among different variables can be explained in detail with the use of SEM. The first step of analysis sits in the measurement model. Then, a structural model is employed. It must be noted that the two steps can be employed simultaneously. This is called two-step approach (J. Anderson & Gerbing, 1988; Hair et al., 2009).

Moreover, the accuracy of the analysis in the form of face validity is included as a tool to examine questionnaires, together with a confirmatory factor analysis. In order to make all these possible, the primary tools for statistical models are reliability and factor loading, suitable for both measurable and structural variables. When the primary data is collected and employed in the measurement models, the questionnaires were adapted and used in the process of data collection. After that, the structural model was employed for the analysis.

3.7.1   The model of confirmatory factor analysis

This model starts with the analysis of the measurement as introduced by Hair et al. (2009). This model has three criterions; chi-square (x^2), goodness of fit index

(GFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). At least one of the criteria must reach the expected levels. The value of chi Square must be relative to degree of freedom. Therefore, the three kinds of measurement must be the model fit. The example is >250 and n (the number of observed variables > 30 which is referred to x^2). This has the significance of the p-value as expected. In the meantime, the value of chi-square/df must less than 5.00 (Loo & Thorpe, 2000), the value of GFI and CFI must be over .90 (Hair, Black, Babin, Anderson, & Tatham, 2006), RMSEA values < .08 (Hair et al., 1998), factor loading and the value of reliability which is .7. If it was .6, it would still be acceptable, and the indicator of this model would be considered satisfactory (Hair et al., 2009).

3.7.2 Structural model

The structural model is the presentation of the relationship between the structural and the construct, using SEM as an analytical framework. This is to test relations by using the theories discussed in the literature review. However, the structural concordance must be evaluated with the indicated numbers which are x^2, GFI, CFI and RMSEA. The analysis leads to a better structural model that can be used to examine leadership in educational institutions. As the model is revised, it will become more applicable to real world circumstances.

3.7.3 ANOVA and T-Test

ANOVA and T-Test is an analysis of variance. The tool is employed to compare the average of the difference among variables at a nominal scale and re-order them in the first part of the questionnaire. These are, for instance, the structure of the vocational institution, knowledge and understanding of the dual system and demography. The class interval and cumulative frequency was sought using the T-test and an examination of critical regions. The significance of the difference of the two groups of population was then tested (Healey, 2012). If there are more than two groups, ANOVA was used to test their significance.

3.8 Conclusion

This chapter has presented quantitative methodology used in the thesis, which begins with sample selection followed by a statistical analysis. Data collection was successful because the Department of Vocational Education facilitated the distribution of the questionnaires. Research focusing on the topics herein has not been performed before.

Other steps in the research concern the testing procedures of the validity and reliability of variables such as leadership at educational institutions, needs satisfaction, quality of relationship and loyalty. The results of the tests are indicated in order to verify samples then, these methods of testing were applied with the hypothesis, as indicated in Chapter 1. In sum, this chapter presents the analytical steps concerned with statistics and how answers to the research question were sought. The answers will be discussed in detail in the following chapters.

CHAPTER 4

RESULTS AND ANALYSIS

This research is the examination of the causal relationship of academic leaders, using mediator variables such as needs satisfaction and factors on the quality of relationships. Loyalty of both the individual to the organisation and leaders are analysed herein. The data has been categorised as a descriptive analysis with the use of SPSS and an analysis of the structural equation model (SEM) with the AMOS programme.

4.1   The summary of data collection and sample:

Data collection started in January and lasted until June, 2019. The informants in this research are instructors and employees at private vocational colleges. The number of the informants is 396, all of whom responded in the questionnaires. The informant must have been working with the institution with a dual system for at least one year. They must at least hold a bachelor degree, as instructors and employees must be granted a certificate as a permission to pursue such a career. Informants must be at least 21 years old with at least one year of pervious work experience. The above criteria are applied to their current position (at the time of answering the questionnaire). Although a number of vocational colleges have launched a dual system, the system is considered very new. Some employees have been working in vocational institutions for years but have not yet been formally registered. As such, some employees that have not officially register may less than a years' worth of experience, formally speaking. Therefore, these candidates were excluded from the research.

Table 4.1 Demographics of sample

Status	Number	Percentage
Gender		
Male	153	39.9
Female	238	60.1
Age		
21-30	121	30.6
31-40	120	30.3
41-50	83	21.0
51-60	57	14.4
61 and over	15	3.8
Education level		
Bachelor degree	273	68.9
Master degree	117	29.5
Doctoral and other	6	1.6
Academic Position		
Instructor / Teacher	312	78.8
Supervisor / Director	34	8.6
Operation and Other	50	12.6
Seniority in Academic (year)		
1-5	165	41.7
6-10	90	22.7
11-15	43	10.9
16-20	26	6.6
21 and over	72	18.2
Tenure in current position (year)		
1-5	189	47.7
6-10	95	24.0
11-15	37	9.3

Status	Number	Percentage
16-20	21	5.3
21 and over	54	13.6

The results of the survey indicate that most respondents were female; 238 persons, or 60.1 percent. Meanwhile, 158 male respondents were surveyed; 39.9 percent. Most respondents were aged between 21 and 30; 30.6 percent. Average education levels a bachelor degree (68.9 percent). Job positions in the sample institutes were; instructors; 312 people (78.8 percent) more than other groups. The majority of the sample (165 people or 41.7 percent of the response) had an average of seniority in academic (year) and tenure in their current position of between 1-5 years; approximately 47.7 percent.

Considering the basic information, there were 57 qualified private vocational institutions from 131 that have implemented the dual system. The number could have been 168 but some have just started to enter the process of implementing the dual system which does not meet the criteria of this thesis at the time of research. Therefore, these institutes were excluded from the analysis. The rate of the institutions that agreed to take part in this research was 43 percent of all vocational institutions. The average number of employees at these educational institutions is between 5-10 persons, per institution. According to Table 4.2, and 4.3, information on the structure and criterion on the dual system is described with percentages, since the informants can give more than one answer in the questionnaires.

Table 4.2 Structural information of the sample

Structure	Percentage	Structure	Percentage
Curriculum		**School size**	
Industry	27.80	Small (less than 1,000 students)	54.70
Arts	0.70	Medium (1,001-2,000 students)	32.20
Information technology	7.50	Large (more than 2,000 students)	13.10
Home economics	0.70	**Instructor size**	
Business administration	51.90	less than 25 persons	36.30
Tourism industry	11.20	26-50 persons	37.00
Agriculture	12.60	51-75 persons	8.80
Fisheries	0.00	more than 76 persons	17.90

Table 4.3 Instructor and firm criteria of the sample

Instructor criteria	Percentage	Firm criteria	Percentage
Pass the level of Thailand Professional Qualification.	44.1	pass knowledge appraisal course for coaching in enterprises.	26.9
Professional Development course more than 40 hours/semester	32.60	Profession training more than 30 hours/year	51.50
Arrange training course in institution for 2 hours/semester	23.30	Experience of trainer in corporate more than 6 months.	21.70

4.2   Result of basic statistics from variables

This section provides the basic statistics from observable variables; 1) transformational leadership, 2) instructional leadership, 3) needs satisfaction, 4) trust, 5) organisational commitment, 6) job satisfaction, 7) leader loyalty, and 8) organisation loyalty. The associated statistical values are presented in table 4.4.

Table 4.4 Mean and standard deviations of the variables

Latent Variable	Observable Variable	Number of Question	Mean	S.D.	Interpretation
Transformational leadership	Idealised influenced	8	4.28	.50	High
	Inspirational motivation	3	4.22	.55	High
	Intellectual stimulation	4	4.18	.54	High
	Individual consideration	4	4.14	.59	High
Instructional Leadership	Promote school-wide professional development	7	4.19	.54	High
	Defines and communicates shared goals	8	4.24	.49	High
	Monitors and provides feedback on the teaching and learning process	8	4.23	.49	High
Need satisfaction	Need autonomy	3	4.04	.68	High
	Need competence	3	4.09	.59	High
	Need relativeness	3	3.97	.65	Moderate
Relationship Quality	Trust	4	4.13	.63	High
	Commitment	14	4.24	.48	High
	Job Satisfaction	14	4.26	.52	High
Loyalty	Leader Loyalty	8	4.18	.54	High
	Organizational Loyalty	4	4.31	.60	High

4.3 Discriminatory power, reliability and primary confirmatory factor analysis (CFA)

This was used to analyze the validity and to modify, by confirmatory factor analysis, from 369 total samples. The confirmatory factor analysis was conducted on AMOS programme to observable variables (transformational leadership, instructional leadership, needs satisfaction, trust, organizational commitment, job satisfaction, leader loyalty and organizational loyalty). For analysis in this section, the researcher uses calculations to find the fitness for CFA, standard regression weight (λ) and construct reliability in each factor load.

4.3.1 Primary measurement model

The fundamental tool employed in this research, employed by experts to test the validity and reliability of samples. After data was collected, it was analyzed with the elements of CFA. The sample of 396 people is illustrated in Picture 4.1. There are eight latent variables. Each shows the questions in the questionnaires.
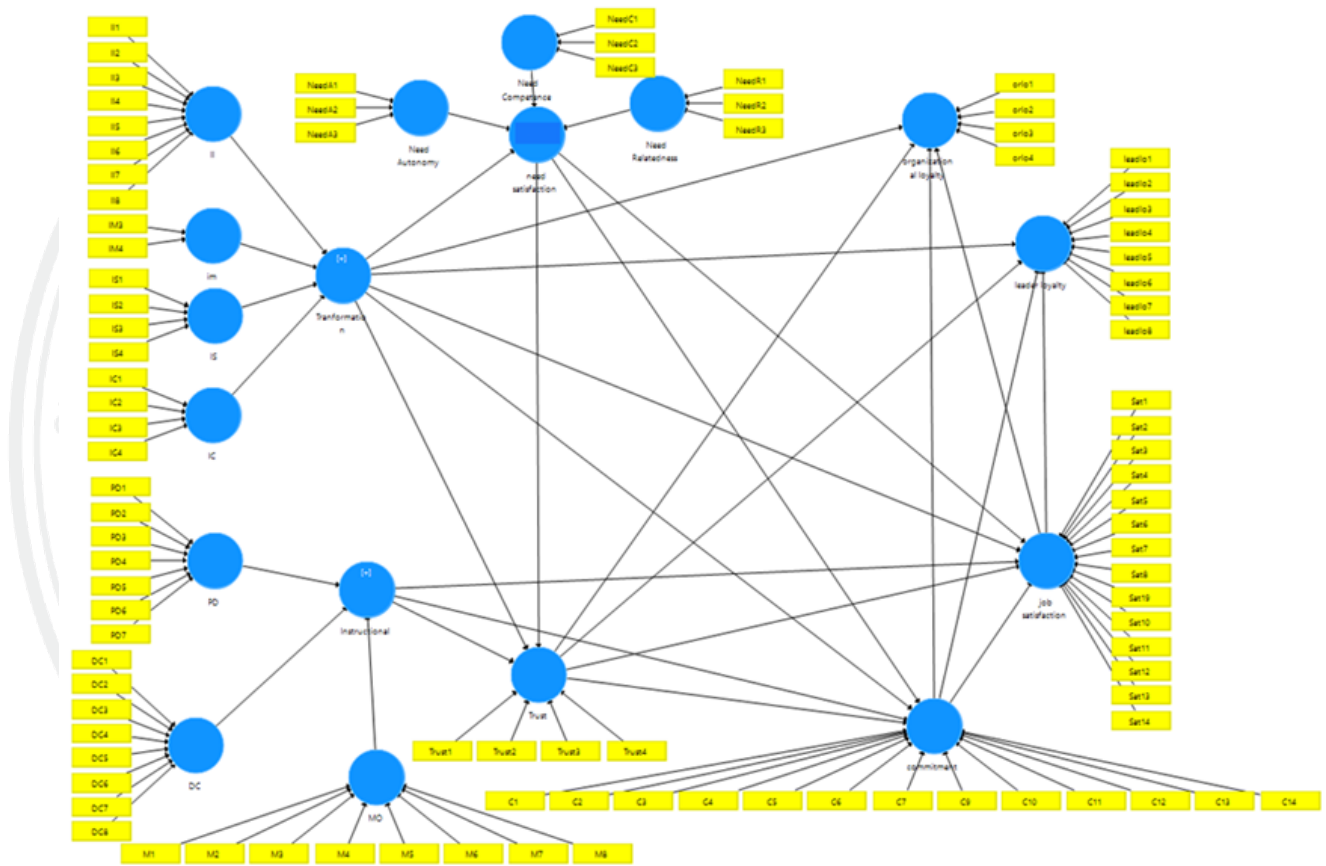
Figure 4.1 Primary measurement model

The validity was later tested using the factor loading tool. Non-qualified factor loading has been excluded. The information is presented in the following table.

Table 4.5 Factor loading of construct in measurement model (primary)

			Estimate				Estimate
II1	<---	II	0.63	needR1	<---	need	0.623
II2	<---	II	0.663	needR2	<---	need	0.771
II3	<---	II	0.712	needR3	<---	need	0.728
II4	<---	II	0.759	Trust1	<---	trust	0.744
II5	<---	II	0.715	Trust2	<---	trust	0.885
II6	<---	II	0.69	Trust3	<---	trust	0.737
II7	<---	II	0.681	Trust4	<---	trust	0.756
II8	<---	II	0.699	C1	<---	Commit	0.62
IM1	<---	IM	0.662	C2	<---	Commit	0.667
IM2	<---	IM	0.884	C3	<---	Commit	0.639
IM3	<---	IM	0.897	C4	<---	Commit	0.661
IS1	<---	IS	0.827	C5	<---	Commit	0.654
IS2	<---	IS	0.786	C6	<---	Commit	0.648
IS3	<---	IS	0.773	C7	<---	Commit	0.509
IS4	<---	IS	0.612	***C8***	***<---***	***Commit***	***0.494***
IC1	<---	IC	0.696	C9	<---	Commit	0.634
IC2	<---	IC	0.763	***C10***	***<---***	***Commit***	***0.447***
IC3	<---	IC	0.787	C11	<---	Commit	0.637
IC4	<---	IC	0.789	C12	<---	Commit	0.617
PD1	<---	PD	0.746	C13	<---	Commit	0.562
PD2	<---	PD	0.677	***C14***	***<---***	***Commit***	***0.416***
PD3	<---	PD	0.693	Sat4	<---	Sat	0.768
PD4	<---	PD	0.758	Sat5	<---	Sat	0.756
PD5	<---	PD	0.77	Sat6	<---	Sat	0.717
PD6	<---	PD	0.743	Sat7	<---	Sat	0.589

			Estimate				Estimate
PD7	<---	PD	0.699	Sat8	<---	Sat	0.715
DC1	<---	DC	0.703	Sat9	<---	Sat	0.614
DC2	<---	DC	0.701	Sat10	<---	Sat	0.514
DC3	<---	DC	0.732	Sat11	<---	Sat	0.691
DC4	<---	DC	0.744	Sat12	<---	Sat	0.687
DC5	<---	DC	0.719	*Sat13*	*<---*	*Sat*	*0.425*
DC6	<---	DC	0.648	Sat14	<---	Sat	0.645
DC7	<---	DC	0.716	Leadlo1	<---	leadlo	0.678
DC8	<---	DC	0.697	Leadlo2	<---	leadlo	0.734
M1	<---	M	0.684	Leadlo3	<---	leadlo	0.737
M2	<---	M	0.697	Leadlo4	<---	leadlo	0.712
M3	<---	M	0.672	Leadlo5	<---	leadlo	0.765
M4	<---	M	0.586	Leadlo6	<---	leadlo	0.715
M5	<---	M	0.702	Leadlo7	<---	leadlo	0.788
M6	<---	M	0.764	Leadlo8	<---	leadlo	0.724
M7	<---	M	0.733	Orlo1	<---	orlo	0.807
M8	<---	M	0.665	Orlo2	<---	orlo	0.883
needA1	<---	need	0.556	Orlo3	<---	orlo	0.847
needA2	<---	need	0.91	Orlo4	<---	orlo	0.802
needA3	<---	need	0.867				
needC1	<---	need	0.682				
needC2	<---	need	0.664				
needC3	<---	need	0.813				

Table 4.5 presents the factor loading of each questionnaire item according to the construct as; (1) TFL (Transformation leadership) has four latent variables; II (idealized influenced), IM (inspirational motivation), IS (intellectual stimulation), and IC (individual consideration), (2) Instructional leadership has three latent variables;

PD (promotes school-wide professional development), DC (defines and communicates shared goals), and M (monitors and provides feedback on the teaching and learning process), (3) relationship quality uses three variables; Trust (trust), Com (organizational commitment), and Sat (job satisfaction), (4) Need (needs satisfaction) has three categories in the construct; needA (needs autonomy), needC (needs competence), and needR (needs relativeness), (5) loyalty has two variables; Leadlo (leader loyalty) and Orlo (organization loyalty). The items which have the factor loading lower than 0.5 (in underline) are not include in the further analysis (Hair et al., 2009). They are C8, C10, C14, Sat2 and Sat13.

The primary measurement model is the first step to modify factors in the structural model. This method eliminated all the factor loading below than 0.5, until the model complete standardize of value. The next section conducts a finished measurement model analysis.

4.3.2 Structural equation modelling

Structural equation modelling measurement model is known as CFA. After the first step was completed, CFA is employed to create measurement for the path analysis of the model. The criterion will be the same and the factor loading should not be less than 0.6. There should not be less than three variables for each question. To confirm that the measurement is clarified and there is no over-identified model, the same sample is used in the structural analysis.
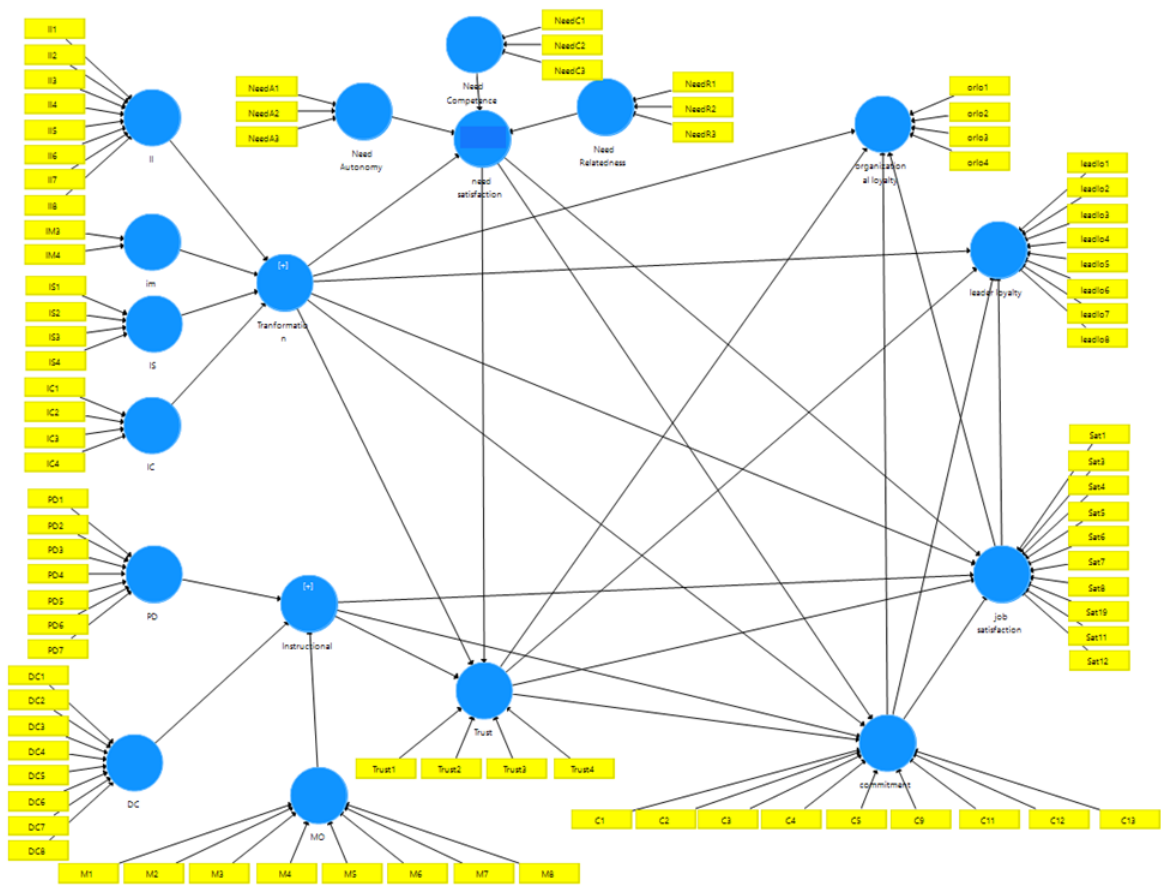
Figure 4.2 Measurement model

Figure 4.2 shows that the criterion in each equation with a standard regression weight of over .5 (.56-88) and Cronbach's Alpha is over 0.7. The researcher describes the construct detail as follows;

4.3.2.1   Transformational leadership (TFL)

Table 4.6 Discriminatory power and reliability of the measurement on the transformational leadership.

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
II	II1	0.643	0.890	0.630	0.881
(idealized	II2	0.665		0.663	

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
Influenced)	II3	0.631		0.712	
	II4	0.698		0.759	
	II5	0.700		0.715	
	II6	0.670		0.690	
	II7	0.660		0.681	
	II8	0.640		0.699	
IM (inspirational motivation)	IM1	0.668	0.806	0.662	0.859
	IM2	0.651		0.884	
	IM3	0.641		0.897	
IS (intellectual stimulation)	IS1	0.700	0.832	0.827	0.839
	IS2	0.692		0.786	
	IS3	0.727		0.773	
	IS4	0.532		0.612	
IC (individual Consideration)	IC1	0.625	0.844	0.696	0.845
	IC2	0.685		0.763	
	IC3	0.707		0.787	
	IC4	0.702		0.789	

Results from table 4.6 represent discriminate power through the value of the corrected item total correlation in transformational leadership that the criterion in each equation has the standard regression weight of above .5 and Cronbach's Alpha is over 0.7. The idealized influenced (II) rages from 0.631-0.700, with the reliability score of 0.889 and construct reliability score of 0.881. The inspirational motivation (IM) rages from 0.641-0.668, with the reliability score of 0.806 and construct reliability score of 0.859. the intellectual stimulation (IS) rages from 0.532-0.700, with the reliability score of 0.832 and construct reliability score of 0.839. Individual consideration (IC) rages from 0.625-0.707, with a reliability score of 0.844 and construct reliability score of 0.845.

4.3.2.2   Instructional Leadership (ISL)

Table 4.7 Discriminatory power and reliability of the measurement on the instructional leadership.

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
PD	PD1	0.727	0.891	0.746	0.887
(promotes	PD2	0.687		0.677	
school-wide	PD3	0.673		0.693	
professional	PD4	0.703		0.758	
Development)	PD5	0.700		0.770	
	PD6	0.676		0.743	
	PD7	0.651		0.699	
DC	DC1	0.630	0.890	0.703	0.889
(defines and	DC2	0.660		0.701	
communicates	DC3	0.695		0.732	
shared goals)	DC4	0.710		0.744	
	DC5	0.681		0.719	
	DC6	0.634		0.648	
	DC7	0.670		0.716	
	DC8	0.642		0.697	
M	M1	0.628	0.882	0.665	0.878
(monitors and	M2	0.635		0.733	
provides	M3	0.583		0.764	
feedback on	M4	0.581		0.702	
the teaching	M5	0.664		0.586	
and learning	M6	0.706		0.672	
process)	M7	0.714		0.697	
	M8	0.664		0.684	

Results from table 4.7 represent discriminate power through the value of the corrected item total correlation in instructional leadership that the criterion in each equation has the standard regression weight of above .5 and Cronbach's Alpha is over 0.7. This promotes school-wide professional development (PD), ranging from 0.651-0.727, with a reliability score of 0.891 and construct reliability score of 0.887. This defines and communicates shared goals (DC) ranging from 0.630-0.710, with a reliability score of 0.890 and a construct reliability score of 0.889. These monitors and provides feedback on the teaching and learning process (M) ranging from 0.581-0.714, with a reliability score of 0.882 and a construct reliability score of 0.878.

4.3.2.3 Needs Satisfaction

Table 4.8 Discriminatory power and reliability of the measurement on the needs satisfaction.

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
Auto (autonomy)	NeedA1	0.506	0.799	0.556	0.830
	NeedA2	0.742		0.910	
	NeedA3	0.711		0.867	
Comp (competency)	NeedC1	0.606	0.749	0.682	0.765
	NeedC2	0.528		0.664	
	NeedC3	0.625		0.813	
Rela (relativeness)	NeedR1	0.543	0.751	0.612	0.752
	NeedR2	0.618		0.771	
	NeedR3	0.576		0.782	

Result from table 4.8 represent discriminate power through the value of the corrected item total correlation in the needs satisfaction that the criterion in each equation has the standard regression weight of above .5 and Cronbach's Alpha is over 0.7. The needs autonomy ranges from 0.556-0.901, with a reliability score of 0.799 and a construct reliability score of 0.830. Needs competency rages from 0.664-0.813, with a reliability score of 0.749 and construct reliability score of 0.765. Needs relativeness rages from 0.612-0.782, with a reliability score of 0.751 and construct reliability score of 0.752.

4.3.2.4 Relationship quality

Table 4.9 Discriminatory power and reliability of the measurement on relationship quality.

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
Trust	Trust1	0.671	0.861	0.744	0.862
	Trust2	0.785		0.885	
	Trust3	0.685		0.737	
	Trust4	0.692		0.756	

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
Organizational commitment	C1	0.583	0.872	0.635	0.872
	C2	0.629		0.686	
	C3	0.594		0.649	
	C4	0.623		0.673	
	C5	0.613		0.664	
	C6	0.595		0.642	
	C9	0.578		0.621	
	C11	0.582		0.617	
	C12	0.577		0.615	
	C13	0.528		0.562	
Job Satisfaction	Sat1	0.677	0.903	0.713	0.900
	Sat3	0.643		0.663	
	Sat4	0.731		0.756	
	Sat5	0.725		0.764	
	Sat6	0.692		0.744	
	Sat7	0.540		0.557	
	Sat8	0.681		0.713	
	Sat9	0.608		0.652	
	Sat11	0.647		0.654	
	Sat12	0.646		0.657	

Results from table 4.9 represent the discriminate power through the value of the corrected item total correlation in the relationship quality that the criterion in each equation has the standard regression weight of above .5 and Cronbach's Alpha is over 0.7. Trust rages from 0.671-0.785, with a reliability score of 0.861 and a construct reliability score of 0.862. Organizational commitment rages from 0.528-0.629, with a reliability score of 0.872 and a construct reliability score of 0.872. Job satisfaction rages from 0.540-0.725, with a reliability score of 0.903 and a construct reliability score of 0.900.

4.3.2.5 Loyalty

Table 4.10 Discriminatory power and reliability of measurements on loyalty.

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
Leader Loyalty	Leadlo1	0.655	0.906	0.678	0.902
	Leadlo2	0.753		0.734	

Observable Variable	Component	Corrected Item Total Correlation	Cronbach's Alpha	Standard Regression Weight (λ)	Construct Reliability (CR)
	Leadlo3	0.737		0.737	
	Leadlo4	0.687		0.712	
	Leadlo5	0.716		0.765	
	Leadlo6	0.686		0.715	
	Leadlo7	0.717		0.788	
	Leadlo8	0.640		0.724	
Organization Loyalty	Orlo1	0.744	0.910	.807	0.902
	Orlo2	0.808		.883	
	Orlo3	0.834		.847	
	Orlo4	0.794		.802	

Results from table 4.10 represent the discriminate power through the value of the corrected item total correlation in the relationship quality that the criterion in each equation has the standard regression weight of above .5 and Cronbach's Alpha is over 0.7. Leader loyalty rages from 0.640 -0.753, with a reliability score of 0.906 and a construct reliability score of 0.902. Organization leaders range from 0.744-0.834, with a reliability score of 0.910 and a construct reliability score of 0.902.

4.4   Secondary confirmatory analysis

The secondary confirmatory analysis is part of the initial stage of analysis. Once factors meet with the criterion, they are used in the analysis in the following step using the AMOS programme to build an appropriate model. Statistics will be evaluated and interpreted such as chi-square, the degree of freedom, goodness of fit index (GFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). The secondary confirmatory factor analysis is used to assess the constructs of (1) transformational leadership: 1.1) idealized influenced (II), (1.2) inspirational motivation (IM), (1.3) intellectual stimulation (IS), and (1.4) individual consideration (IC); (2) instructional leadership (ISL): (2.1) promoting school-wide professional development (PD), (2.2) defines and communicates shared goals (DC), and(2.3) monitors and provides feedback on the teaching and learning process (M); (3) needs satisfaction: (3.1) needs autonomy, (3.2) needs competency, and (3.3) needs relatedness. The criterion set for the analysis is chi-Square/df should not exceed 5.00 (Loo & Thorpe,

2000), The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998).

4.4.1 Transformation leadership

Table 4.11 Statistical values of latent variables between the measurement models and transformation leadership

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Transformation leadership	346.571	144	2.407	0.000	.952	.919	0.060

The analysis of Table 4.11 implies that the rate of relative chi-square (x^2/ df) is calculated as 2.407. Meanwhile, p-value is calculated as 0.000; GFI 0.952, CFI 0.919, and RMSEA 0.060 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurement then fits with the theoretical model and is also acceptable.

4.4.2 Instructional leadership

Table 4.12 Statistical values of latent variables between the measurement models and instructional leadership

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Instructional leadership	477.949	215	2.223	0.000	.903	.949	0.056

The analysis of Table 4.12 implies that the rate of Relative Chi-square (x^2/ df) is calculated as 2.223. Meanwhile, p-value is calculated as 0.000; GFI 0.903, CFI 0.949, and RMSEA 0.056 respectively. Obviously, all of these meet the criterion set for the

analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with empirical evidence. The measurement then fits with the theoretical model and is also acceptable.

4.4.3 Needs satisfaction

Table 4.13 Statistical value of latent variables between the measurement models and needs satisfaction

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Need Satisfaction	70.745	23	3.076	0.000	.962	.968	0.072

The analysis of Table 4.13 implies that the rate of relative chi-square (x^2/ df) is calculated as 3.076. Meanwhile, p-value is calculated as 0.000; GFI 0.962, CFI 0.968, and RMSEA 0.072 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with empirical evidence. The measurement then fits with the theoretical model and is also acceptable.

4.5 Primary confirmatory analysis

Primary confirmatory analysis is part of the initial stage of the analysis. Once, the factors meet with the criterion, they were used in the analysis in the following step with the AMOS programme to build an appropriate model. Statistics are then evaluated and interpreted such as chi-square, degree of freedom, goodness of fit index (GFI), comparative fit index (CFI) and root mean square error of approximation (RMSEA). The primary confirmatory factor analysis is used to assess the constructs of (1) relationship quality: 1.1) trust, (1.2) organisational commitment, and (1.3) job satisfaction; (2) loyalty: (2.1) leader loyalty and (2.2) organisational loyalty. The criterion set for the analysis is chi-square/df should not exceed 5.00 (Loo & Thorpe,

2000), The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998).

4.5.1 Trust

Table 4.14 Statistical value of latent variable between the measurement model and Trust

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Trust	6.212	2	3.136	0.043	0.992	0.994	0.074

The analysis of Table 4.14 implies that the rate of relative chi-square (x^2/ df) is calculated as 3.136. Meanwhile, p-value is calculated as 0.043; GFI 0.992, CFI 0.994, and RMSEA 0.074 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurement then fits with the theoretical model and is also acceptable.

4.5.2 Organisational commitment

Table 4.15 Statistical value of latent variable between the measurement model and Organisational Commitment

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Organisational Commitment	101.215	35	2.892	0.000	0.947	0.949	0.069

The analysis of Table 4.15 implies that the rate of relative chi-square(x^2/ df) is calculated as 2.892. Meanwhile, p-value is calculated as 0.000; GFI 0.947, CFI 0.949, and RMSEA 0.069 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should

be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with empirical evidence. The measurement then fits with the theoretical model and is also acceptable

4.5.3 Job satisfaction

Table 4.16 Statistical value of latent variable between the measurement model and
Job Satisfaction

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Job Satisfaction	61.022	30	2.034	0.001	1.000	0.984	0.051

The analysis of Table 4.16 implies that the rate of relative chi-square (x^2/ df) is calculated as 2.034. Meanwhile, p-value is calculated as 0.001; GFI 1.000, CFI 0.984, and RMSEA 0.051 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with empirical evidence. The measurement then fits with the theoretical model and is also acceptable

4.5.4 Leader loyalty

Table 4.17 Statistical value of latent variable between the measurement model and
leader loyalty

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Leader Loyalty	45.714	16	2.857	0.000	0.971	0.982	0.069

The analysis of Table 4.17 implies that the rate of relative chi-square (x^2/ df) is calculated as 2.857. Meanwhile, p-value is calculated as 0.000; GFI 0.971, CFI 0.982,

and RMSEA 0.069 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurement then fits with the theoretical model and is also acceptable

4.5.5 Organisation loyalty

Table 4.18 Statistical value of latent variables between the measurement models and organisation loyalty

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA
Organisation Loyalty	0.109	1	0.109	0.741	1.000	1.000	0.000

The analysis of Table 4.18 implies that the rate of Relative Chi-square (x^2/ df) is calculated as 0.109. Meanwhile, p-value is calculated as 0.741; GFI 1,000, CFI 1.000, and RMSEA 0.000 respectively. Obviously, all of these meet the criterion set for the analysis. The Chi-Square/df should not exceed 5.00, The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurement then fits with the theoretical model and is also acceptable

4.6 Path analysis and hypothesis testing

This thesis formulated its hypothesis, detailing the relationship between the structural variables of leadership in/at educational institutions and their impacts on employee behaviour. According to private vocational administrations in colleges with a dual system, the analysis is categorised into three groups; structural, path analysis, and the separation of independent variables (leadership at educational institution). For example, the variables are transformational leadership, instructional leadership and the combination of the two in one model. This is to analyse the relationship with other paths that impact other variables in the structure.

The equation in the structure of each model will be discussed in detail. The level of the number they are categorised with is indicated so that they are employed in the analysis that fits with the model. Results in the tables provide information on path coefficients (standardized regression weight), p-value (testing significance), R^2 (the squared multiple correlations), endogenous constructs, and exogenous variables. Finally, the paths that have statistical significance with each model are presented.

4.6.1 Transformational leadership

Table 4.19 Statistical value of the structural model modification: transformational leadership

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA	HOELTER 0.05
Transformational leadership	104.905	38	2.761	0.000	0.957	0.976	0.067	202

The analysis of Table 4.19 implies that the rate of relative chi-square(x^2/ df) is calculated as 2.761. Meanwhile, p-value is calculated as 0.000; GFI 0.957, CFI 0.976, RMSEA 0.067, and HOELTER 202>200 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00 (Loo & Thorpe, 2000), The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurements fit within the theoretical model and is also acceptable.

When the method of path coefficients is used, p-value and R^2 appears as indicated in Table 4.20. It can be used to explain the path of the influence of variables in the structure. For example, the needs satisfaction of the employees in private vocational education institutes with dual systems has the rate of R^2 at 0.412, meaning the variation of needs satisfaction occurs as a result of the influence variable of transformational leadership, and can be calculated as 41.2%. (See the influence variable in Picture 4.3). The path coefficient of needs satisfaction and job satisfaction is calculated as 0.097. The p-value is 0.128 which has higher significance than 0.05,

meaning there is no significance in terms of causality between needs satisfaction and job satisfaction. According to the table that shows the path of the coefficients, there are three levels of significance (p = *.05, **.01, ***.001). For instance, the employees' needs satisfaction is more likely to have the standardized regression weight that would lead to organisational commitment rather than trust (0.385>0.295). In additional, organisational commitment causes direct variation towards loyalty among leaders, and can be calculated as 61.5% and loyalty towards the organisation as 59%.

Table 4.20 Path coefficients and explained variance: transformational leadership

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Transformational leadership					
Needs Satisfaction	0.642	0.607	0.067	9.114	***
Trust	0.468	0.647	0.087	7.422	***
Commitment	0.252	0.261	0.071	3.683	***
Job satisfaction	0.266	0.301	0.072	4.153	***
Leader loyalty	0.249	0.294	0.067	4.408	***
Organisation loyalty	*-0.002*	*-0.003*	*0.077*	*-0.037*	*0.971*
Need Satisfaction ($R^2 = 0.412$)					
Trust	0.295	0.431	0.094	4.599	***
Commitment	0.385	0.422	0.076	5.534	***
Job satisfaction	*0.097*	*0.116*	*0.076*	*1.522*	*0.128*
Trust ($R^2 = 0.484$)					
Commitment	*0.295*	*0.116*	*0.076*	*1.522*	*0.128*
Job satisfaction	*0.095*	*0.078*	*0.042*	*1.837*	*0.066*
Leader loyalty	0.16	0.136	0.038	3.532	***
Organisation loyalty	*-0.047*	*-0.044*	*0.044*	*-1.014*	*0.311*
Commitment ($R^2 = 0.457$)					
Job satisfaction	0.391	0.427	0.054	7.870	***
Leader loyalty	0.379	0.43	0.051	8.430	***
Organisation loyalty	0.198	0.249	0.062	4.004	***
Job satisfaction ($R^2 = 0.527$)					
Leader loyalty	0.141	0.146	0.048	3.028	0.002**

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Organisation loyalty	0.207	0.238	0.055	4.333	***
Leader loyalty (R^2 = 0.615)					
Organisation loyalty (R^2 = 0.590)	0.489	0.542	0.058	9.301	***
* p < .05 ** p < .01 *** p < .001					

When the results are illustrated in the model that employs transformational leadership in a private vocational institution with a dual system, the causal relationship among each variable becomes obvious. According to Picture 4.3, the path of coefficients can be witnessed as a standardized direct effect among the variables, as indicated in the research framework. However, there are some variables that do not have relationship with other variables. For example, transformational leadership has no effect on loyalty towards the organisation. Needs satisfaction has no relationship with job satisfaction. Employee trust has no relationship with job satisfaction and loyalty towards the organisation. The rest indicates the relationships as shown in the Picture below.

Figure 4.3 Transformational leadership in private vocational educational institutes
model

4.6.2 Instructional leadership

Table 4.21 Statistical value of the structural model modification: instructional
leadership

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA	HOELTER 0.05
Instructional Leadership	29.697	10	2.970	0.001	0.982	0.991	0.071	244

The analysis of Table 4.21 implies that the rate of relative chi-square ($x^2/$ df) is calculated as 2.970. Meanwhile, p-value is calculated as 0.001; GFI 0.982, CFI 0.991, RMSEA 0.071, and HOELTER 244>200 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00 (Loo & Thorpe,

2000), The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with the empirical evidence. The measurement fits with the theoretical model and is also acceptable.

When the method of path coefficients is used in the research, p-value and R^2 appears as indicated in the table 4.22. It can be used to explain the path of the influence of variables in the structure. For example, the trust of employees in a private vocational education institute with a dual system has the rate of R^2 at 0.438, meaning that the variation of trust occurs as a result of the influence variable of instructional leadership, and can be calculated as 43.8%. (See the influence variable in Picture 4.4). The path coefficient of trust and job satisfaction is calculated as 0.087. The p-value is 0.074 which has higher significance than 0.05, meaning that there is no significance in terms of causality between trust and job satisfaction. According to the table that shows the path of the coefficients, there are three levels of significance (p = *.05, **.01, ***.001). For instance, the employees' organisational commitment is more likely to have the standardized regression weight that would lead to leader-loyalty rather than trust (0.384>0.173). In addition, the organisational commitment causes a direct variation towards loyalty among leaders that can be calculated as 60.9% and loyalty towards the organisation as 59.7%.

Table 4.22 Path coefficients and explained variance: instructional leadership

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Instructional leadership					
Trust	0.661	0.977	0.067	14.662	***
Commitment	0.452	0.501	0.066	7.551	***
Job satisfaction	0.361	0.437	0.069	6.316	***
Leader loyalty	0.229	0.288	0.07	4.105	***
Organization loyalty	0.126	0.176	0.081	2.179	0.029**
Trust ($R^2 = 0.438$)					
Commitment	0.227	0.171	0.042	4.079	***

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Job satisfaction	*0.087*	*0.071*	*0.04*	*1.787*	*0.074*
Leader loyalty	0.173	0.147	0.038	3.869	***
Organization loyalty	*-0.089*	*-0.084*	*0.043*	*-1.957*	*0.050*
Commitment ($R^2 = 0.392$)					
Job satisfaction	0.394	0.43	0.049	8.692	***
Leader loyalty	0.384	0.436	0.051	8.547	***
Organization loyalty	0.187	0.236	0.062	3.806	***
Job satisfaction ($R^2 = 0.542$)					
Leader loyalty	0.135	0.14	0.049	2.832	0.005**
Organization loyalty	0.171	0.197	0.056	3.528	***
Leader loyalty ($R^2 = 0.609$)					
Organization loyalty ($R^2 = 0.597$)	0.459	0.509	0.057	8.902	***

* $p < .05$

** $p < .01$

*** $p < .001$

The results are illustrated in the model that only employs instructional leadership in a private vocational institution with dual system, the causal relationships among each variable will be obvious. According to Picture 4.4, the path of coefficients can be seen as standardized direct effects among the variables as indicated in the research framework. However, there are some variables that do not have relationship with others variables. For example, trust has no effect on job satisfaction and loyalty towards the organisation. The rest indicates the relations as shown in the Picture.

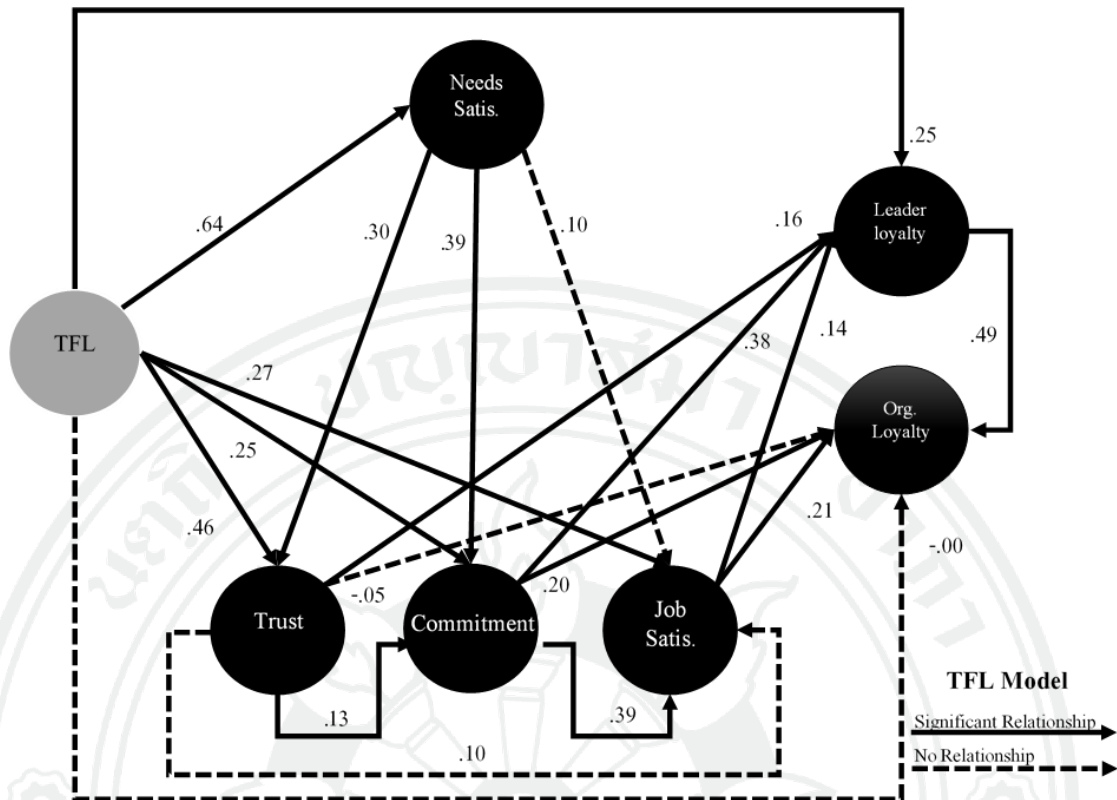**Figure 4.4** Instructional leadership in private vocational educational institutes model

4.6.3 Transformational leadership and instructional leadership

Table 4.23 Statistical value of the structural model modification: transformational
leadership and instructional leadership

	Chi-square	df	Chi-square/df	P-value	GFI	CFI	RMSEA	HOELTER 0.05
TFL+ISL	156.626	67	2.338	0.000	0.950	0.978	0.058	220

The analysis of Table 4.23 implies that the rate of relative Chi-square (x^2/ df) is calculated as 2.338. Meanwhile, p-value is calculated as 0.000; GFI 0.950, CFI 0.978, RMSEA 0.058, and HOELTER 220>200 respectively. Obviously, all of these meet the criterion set for the analysis. The chi-square/df should not exceed 5.00 (Loo & Thorpe, 2000), The number of GFI and CFI should be equal or more than 0.90 (Hair et al., 2006). Also, RMSEA should be 0.08 (Hair et al., 1998). In short, this model is in harmony with empirical evidence. The measurement then fits with the theoretical model and is also acceptable.

When the method of path coefficients is used in the research, p-value and R^2 appears as indicated in table 4.24. It can be used to explain the path of the school leadership (TFL &ISL), and influence of variables in the structure. According to the table that shows the path of the coefficients, there are three levels of significance (p = *.05, **.01, ***.001).

Table 4.24 Path coefficients and explained variance: transformational and instructional leadership

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Transformational leadership					
Needs Satisfaction	0.676	0.607	0.061	9.872	***
Trust	*0.276*	*0.363*	*0.457*	*0.795*	*0.427*
Commitment	*-0.270*	*-0.266*	*0.351*	*-0.758*	*0.448*
Job satisfaction	*-0.124*	*-0.134*	*0.358*	*-0.375*	*0.708*
Leader loyalty	*0.264*	*0.296*	*0.315*	*0.939*	*0.348*
Organization loyalty	-1.000	-1.243	0.575	-2.164	0.030*
Instructional leadership					
Trust	*0.227*	*0.337*	*0.490*	*0.687*	*0.492*
Commitment	*0.532*	*0.593*	*0.377*	*1.574*	*0.115*
Job satisfaction	*0.451*	*0.549*	*0.389*	*1.412*	*0.158*
Leader loyalty	*-0.012*	*-0.015*	*0.354*	*-0.044*	*0.954*
Organization loyalty	1.052	1.475	0.640	2.304	0.021*
Needs Satisfaction ($R^2 = 0.457$)					
Trust	0.262	0.385	0.097	3.962	***
Commitment	0.388	0.427	0.080	5.346	***
Job satisfaction	*0.093*	*0.112*	*0.081*	*1.381*	*0.167*
Trust ($R^2 = 0.493$)					
Commitment	0.123	0.092	0.043	2.136	0.033*
Job satisfaction	*0.072*	*0.059*	*0.042*	*1.405*	*0.160*
Leader loyalty	0.155	0.132	0.039	3.345	***
Organization loyalty	*-0.038*	*-0.036*	*0.058*	*-0.633*	*0.534*
Commitment ($R^2 = 0.472$)					
Job satisfaction	0.361	0.394	0.056	6.972	***
Leader loyalty	0.382	0.434	0.051	8.455	***
Organization loyalty	0.169	0.212	0.081	2.624	0.009**
Job satisfaction ($R^2 = 0.547$)					

	Std. regression weight	regression weight			
	Path Coefficient	Estimate	S.E.	C.R.	P-value
Leader loyalty	0.136	0.141	0.050	2.817	0.005**
Organization loyalty	0.152	0.175	0.074	2.355	0.019*
Leader loyalty ($R^2 = 0.615$)					
Organization loyalty ($R^2 = 0.667$)	0.504	0.559	0.075	7.463	***
* $p < .05$					
** $p < .01$					
*** $p < .001$					

When the results are illustrated within a model that combines transformational leadership and instructional leadership in a private vocational institution with a dual system, the causal relationships between each variable become clear. According to Picture 4.5, the path of coefficients can be seen as a standardized direct effect among the variables as indicated in the research framework. However, there are some variables that do not have relationships with others. For example, instruction leadership and transformational leadership have no effect on relationship quality (trust, organisation commitment, and job satisfaction) and leader loyalty. Needs satisfaction has no relationship with job satisfaction. Employee trust has no relationship with job satisfaction and loyalty towards the organisation. The rest indicates the relationships as shown in the below Picture.
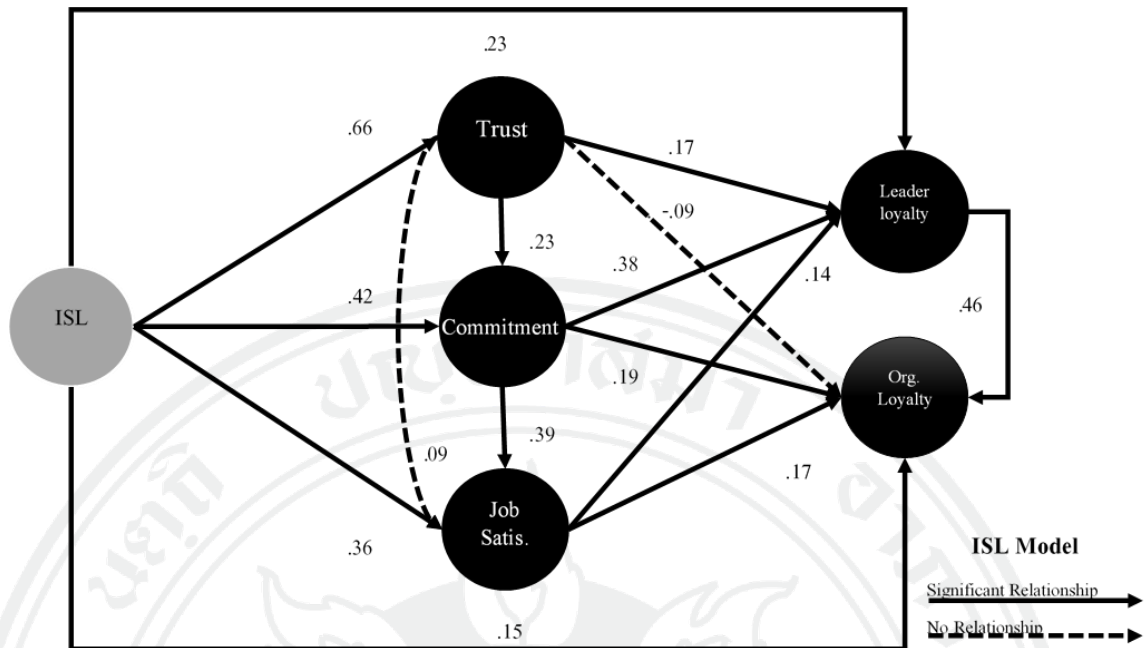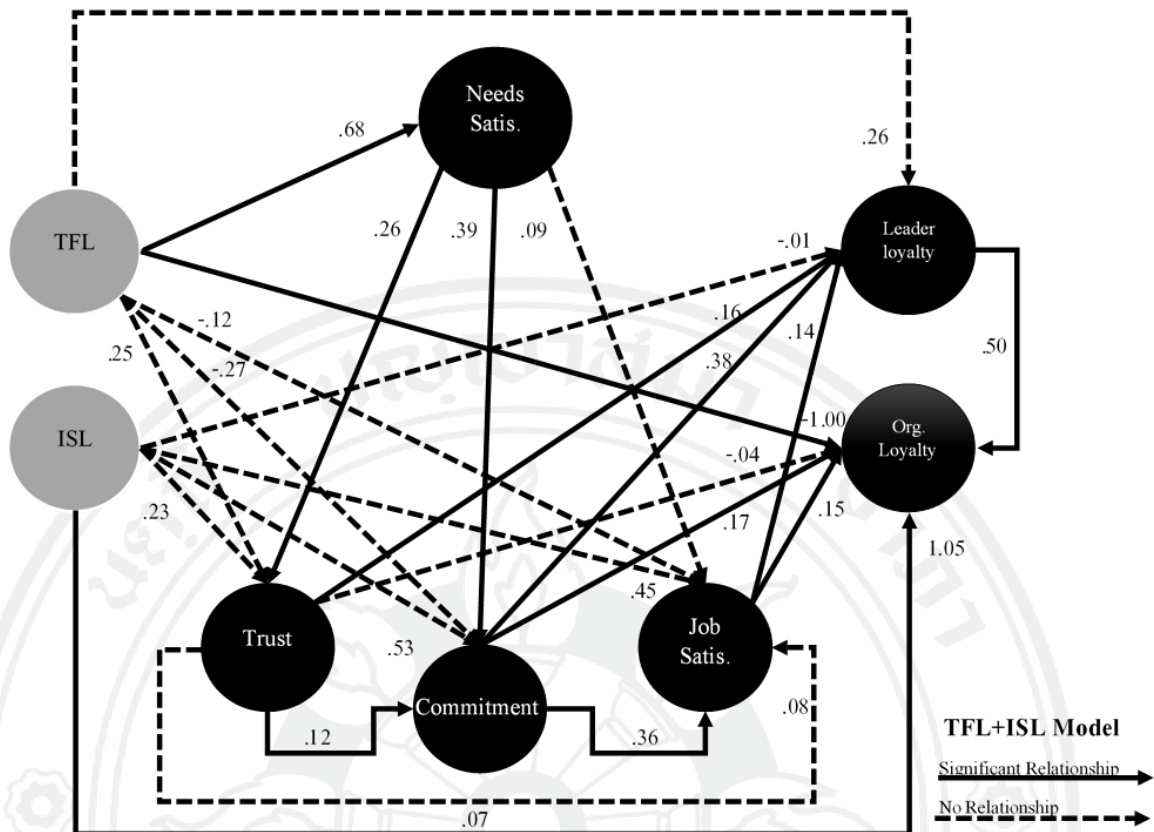
Figure 4.5 Transformational leadership and instructional leadership in a private

          vocational educational institute model

4.6.4 Hypotheses testing conclusion

    From the three models of each type of educational leadership model,

hypotheses testing is concluded in table 4.25

Table 4.25 Hypotheses testing

no	hypotheses	TFL	ISL	TFL+ISL
H1a	Transformational leadership has a significant positive influence on leader loyalty	✓	-	✗
H1b	Transformational leadership has a significant positive influence on organisation loyalty	✗	-	✓
H2a	Transformational leadership has a significant positive influence on trust	✓	-	✗
H2b	Transformational leadership has a significant positive influence on organisational commitment	✓	-	✗
H2c	Transformational leadership has a significant positive influence on job satisfaction	✓	-	✗

no	hypotheses	TFL	ISL	TFL+ISL
H3	Transformational leadership has a significant positive influence on needs satisfaction	✓	-	✓
H4a	Needs satisfaction has a significant positive influence on trust	✓	-	✓
H4b	Needs satisfaction has a significant positive influence on organisational commitment	✓	-	✓
H4c	Needs satisfaction has a significant positive influence on job satisfaction	X	-	X
H5a	Instructional leadership has a significant positive influence on leader loyalty	-	✓	X
H5b	Instructional leadership has a significant positive influence on organisation loyalty	-	✓	✓
H6a	Instructional leadership has a significant positive influence on trust	-	✓	X
H6b	Instructional leadership has a significant positive influence on organisational commitment	-	✓	X
H6c	Instructional leadership has a significant positive influence on job satisfaction	-	✓	X
H7a	Trust has a significant positive influence on leader loyalty	✓	✓	✓
H7b	Trust has a significant positive influence on organisation loyalty	X	X	X
H8a	Organisational commitment has a significant positive influence on leader loyalty	✓	✓	✓
H8b	Organisational commitment has a significant positive influence on organisational loyalty	✓	✓	✓
H9a	Job satisfaction has a significant positive influence on leader loyalty	✓	✓	✓
H9b	Job satisfaction has a significant positive influence on organisational loyalty	✓	✓	✓
H10a	Institutional demographic has a significant positive influence on job satisfaction	X	X	X
H10b	Educational structure has a significant positive influence on job satisfaction	X	X	X

(✓) accepted hypothesis (x) rejected hypothesis (-) no hypothesis in that model

The discussion of hypothesis testing on TFL and ISL is as followed;

H1a: Transformational leadership has implications of direct influence on the loyalty of the leaders in educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to a leader loyalty. Transformational leadership has a significance on loyalty of leaders (path coefficient is indicated at 0.249 t-value = 0.441 and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over parts that are significant to transformational leadership at an educational institution and to forecast the results of a leader's loyalty in that institution.

H1b: Transformational leadership has implications of the direct influence of loyalty fin educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to leader loyalty. Transformational leadership has significance on an organisations loyalty (path coefficient is indicated at -1.000 t-value = -0.216 and P ≤ 0.030). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance for transformational leadership at an educational institution and to forecast the result of the organisations' loyalty in that institution.

H2a: Transformational leadership has implications of the direct influence for the direct influence of trust for employees in educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to employee trust. Transformational leadership has significance on trust (path coefficient is indicated at 0.468, t-value = 0.742, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on transformational leadership in an educational institution and to forecast the results of the trust in that institution.

H2b: Transformational leadership has implications of direct influence for the organisational commitment of employees in educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to the organisational commitment. Transformational leadership has significance on organisational commitment (path coefficient is indicated at 0.252, t-value = 0.368, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance for transformational leadership at educational institutions and to forecast the results of organisational commitment.

H2c: Transformational leadership has implications of direct influence on job satisfaction of employees in educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to the job satisfaction of employees. Transformational leadership has significance for job satisfaction (path coefficient is indicated at 0.266, t-value = 0.415, and $P \leq 0.000$). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance for transformational leadership at educational institutions and to forecast the results of the job satisfaction in that institution.

H3: Transformational leadership has implications of direct influence on the needs satisfaction of employees in educational institutions *(parts of hypothesis).*

This hypothesis explains that transformational leadership helps estimate what can contribute to employee needs satisfaction. Transformational leadership has significance on needs satisfaction (path coefficient is indicated at 0.642 t-value = 0.911 and $P \leq 0.000$) which is shown in Table 4.20 and is the model used to study the relationship over the parts that are significant for transformational leadership at educational institutions and to forecast the result of needs satisfaction in that institution.

This hypothesis explains that the combination model of institutional leadership, and transformational leadership helps estimate what can contribute to needs satisfaction for employees. Transformational leadership has some significance on needs satisfaction (path coefficient is indicated at 0.676 t-value = 0.987 and $P \leq 0.000$), which is shown in Table 4.24 and is the model used to study the relationship over the parts that are significant for transformational leadership in educational institution and to forecast the result of needs satisfaction in that institution.

H4a: Needs satisfaction has implications of direct influence on employee trust in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that transformational leadership model helps estimate what can contribute to the needs satisfaction impacts of trust for employees. Needs satisfaction has significance on trust (path coefficient is indicated at 0.642, t-value = 0.911, and $P \leq 0.000$). which is shown in Table 4.20 and is the model used to study

the relationship over the parts that have significance on needs satisfaction and to forecast the result of employee trust in that institution.

This hypothesis explains that the combination model of institutional leadership, Transformational leadership helps estimate what can contribute to needs satisfaction impact trust of employees. Needs satisfaction has significance on trust (path coefficient is indicated at 0.262, t-value = 0.396, and P ≤ 0.000). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance for needs satisfaction and to forecast the result of employees' trust in that institution.

H4b: Needs satisfaction has implications of direct influence on organisational commitment in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that the transformational leadership model helps estimate what can contribute to needs satisfaction impacts on organisational commitment of employees. Needs satisfaction has significance on organisational commitment (path coefficient is indicated at 0.385, t-value = 0.553, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on needs satisfaction and to forecast the result of organisational commitment in that institution.

This hypothesis explains that the combination model of institutional leadership, and transformational leadership helps estimate what can contribute to the needs satisfaction impact on organisational commitment of employees. Needs satisfaction has significance on organisational commitment (path coefficient is indicated at 0.388, t-value = 0.534, and P ≤ 0.000). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance on needs satisfaction and to forecast the result of organisational commitment in that institution.

H4c: Needs satisfaction has implications of direct influence on employee job satisfaction in educational institutions *(the hypothesis H4c is rejected).*

H5a: Instructional leadership has implications of direct influence on the loyalty of leaders in educational institutions *(parts of hypothesis).*

This hypothesis explains that instructional leadership helps estimate what can contribute to the loyalty of leaders. Instructional leadership has significance on the loyalty of the leaders (path coefficient is indicated at 0.229 t-value = 0.411 and P ≤ 0.000), which is shown in Table 4.22. And is the model used to study the relationship over the parts that have significance on the Instructional Leadership at educational institution and to forecast the result of the leader's loyalty in that institution.

H5b: Instructional leadership has implications of direct influence on the loyalty of the educational institutions *(accepted all of hypothesis).*

This hypothesis explains that instructional leadership helps estimate what can contribute to a loyalty in an educational institution. Instructional leadership has significance on organisation loyalty (path coefficient is indicated at 0.126 t-value = 0.218 and P ≤ 0.029). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on instructional leadership at an educational institution and to forecast the result of loyalty in that institution.

This hypothesis explains that the combination model of transformational leadership, and instructional leadership helps estimate what can contribute to loyalty. Instructional leadership has significance on organisation loyalty (path coefficient is indicated at 1.052 t-value = 0.230 and P ≤ 0.021). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance for instructional leadership at an educational institution and to forecast the result of loyalty in that institution.

H6a: Instructional leadership has implications of direct influence on the trust of employees in educational institutions *(parts of hypothesis).*

This hypothesis explains that instructional leadership helps estimate what can contribute to employee trust. Instructional leadership has significance on trust (path coefficient is indicated at 0.661, t-value = 1.466 and P ≤ 0.000). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on instructional leadership at educational institutions and to forecast the result of the trust in that institution.

H6b: Instructional leadership has implications of direct influence on organisational commitment in educational institutions *(parts of hypothesis).*

This hypothesis explains that instructional leadership helps estimate what can contribute to the organisational commitments among employees in that educational institution. Instructional leadership has significance on organisational commitment (path coefficient is indicated at 0.661, t-value = 1.466, and P ≤ 0.000). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on instructional leadership at educational institutions and to forecast the result of the organisational commitment in that institution.

H6c: Instructional Leadership has implications of direct influence on job satisfaction in educational institutions *(parts of hypothesis).*

This hypothesis explains that instructional leadership helps estimate what can contribute to the job satisfaction of employees. Instructional leadership has significance on job satisfaction (path coefficient is indicated at 0.361, t-value = 0.631 and P ≤ 0.000). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on the instructional leadership at educational institutions and to forecast the result of job satisfaction in that institution.

H7a: Trust has implications of direct influence on the loyalty of leaders in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that trust, in the transformational leadership model, helps estimate what can contribute to the leader loyalty. Trust has significance on the loyalty of the leaders (path coefficient is indicated at 0.160, t-value = 0.353, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on the trust of employees in educational institutions and to forecast the result of the leader's loyalty in that institution.

This hypothesis explains that trust, in the transformational leadership model, helps estimate what can contribute to the leader loyalty. Trust has significance on the loyalty of the leaders (path coefficient is indicated at 0.173, t-value = 0.387, and P ≤ 0.000). This is shown in Table 4.22 and is the model used to study the relationship

over the parts that have significance on the trust of employees in educational institutions and to forecast the result of the leader's loyalty in that institution.

This hypothesis explains that trust, in the combination model, helps estimate what can contribute to leader loyalty. Trust has significance on the loyalty of leaders (path coefficient is indicated at 0.155, t-value = 0.335, and $P \leq 0.000$). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance on the trust of employees in educational institutions and to forecast the result of the leader's loyalty in that institution.

H7b: Trust has implications of direct influence on loyalty in educational institutions *(the hypothesis H7b is rejected).*

H8a: Organisational commitment has implications of direct influence on the loyalty of leaders in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that the organisational commitment component of the transformational leadership model helps estimate what can contribute to the leader loyalty. Organisational commitment has significance on the loyalty of leaders (path coefficient is indicated at 0.379, t-value = 0.843, and $P \leq 0.000$). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on organisational commitment in educational institutions and to forecast the result of the leader's loyalty in that institution.

This hypothesis explains that the organisational commitment component of the instructional leadership model helps estimate what can contribute to the leader loyalty. Organisational commitment has significance on the loyalty of the leaders (path coefficient is indicated at 0.384, t-value = 0.855 and $P \leq 0.000$). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on organisational commitment in educational institutions and to forecast the result of the leader's loyalty in that institution.

This hypothesis explains that the organisational commitment component of the combination model helps estimate what can contribute to the leader loyalty. Organisational commitment has significance on loyalty of the leaders (path coefficient is indicated at 0.382, t-value = 0.846 and $P \leq 0.000$). This is shown in Table 4.24 and

is the model used to study the relationship over the parts that have significance on the organisational commitment in educational institutions and to forecast the result of the leader's loyalty in that institution.

H8b: Organisational commitment has implications of direct influence on loyalty in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that the organisational commitment component of the instructional leadership model helps estimate what can contribute to the organisational loyalty. Organisational commitment has significance on loyalty of the organisation (path coefficient is indicated at 0.198, t-value = 0.400, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on organisational commitment in educational institutions and to forecast the result of the organisational loyalty in that institution.

This hypothesis explains that the organisational commitment component of the instructional leadership model helps estimate what can contribute to organisational loyalty. Organisational commitment has significance on loyalty of the organisation (path coefficient is indicated at 0.187, t-value = 0.381, and P ≤ 0.000). This is shown in Table 4.22. And is the model used to study the relationship over the parts that have significance on the organisational commitment in educational institution and to forecast the result of the organisation's loyalty in that institution.

This hypothesis explains that the organisational commitment component of the combination model helps estimate what can contribute to an organisations' loyalty. Organisational commitment has significance on the loyalty in an organisation (path coefficient is indicated at 0.169, t-value = 0.262, and P ≤ 0.009). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance on organisational commitment in educational institutions and to forecast the result of the organisation's loyalty in that institution.

H9a: Job satisfaction has implications of direct influence on the loyalty of leaders in educational institutions *(accepted all of hypothesis).*

This hypothesis explains that the job satisfaction component of the instructional leadership model helps estimate what can contribute to the leader

loyalty. Job satisfaction has significance on the loyalty of leaders (path coefficient is indicated at 0.141, t-value = 0.303, and P ≤ 0.002). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on job satisfaction in educational institutions and to forecast the result of the leader's loyalty in that institution.

This hypothesis explains that the job satisfaction component of the instructional leadership model helps estimate what can contribute to leader loyalty. Job satisfaction has significance on the loyalty of leaders (path coefficient is indicated at 0.135, t-value = 0.283 and P ≤ 0.005). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on job satisfaction in educational institutions and to forecast the result of leader loyalty in that institution.

This hypothesis explains that the job satisfaction component of the combination model helps estimate what can contribute to leader loyalty. Job satisfaction has significance on the loyalty of the leaders (path coefficient is indicated at 0.136, t-value = 0.282 and P ≤ 0.005). This is shown in Table 4.24 and is the model used to study the relationship over the parts that have significance on job satisfaction in educational institutions and to forecast the result of the leader's loyalty in that institution.

H9b: The job satisfaction has implications of direct influence on loyalty in educational institutions *(accepted all of hypothesis)*.

This hypothesis explains that the job satisfaction component of the instructional leadership model helps estimate what can contribute to the organisational loyalty in that educational institution. Job satisfaction has significance on the loyalty of the organisation (path coefficient is indicated at 0.207, t-value = 0.433, and P ≤ 0.000). This is shown in Table 4.20 and is the model used to study the relationship over the parts that have significance on job satisfaction in educational institutions and to forecast the result of the organisational loyalty in that institution.

This hypothesis explains that the job satisfaction component of the instructional leadership model helps estimate what can contribute to organisational loyalty. Job satisfaction has significance on loyalty of the organisation (path

coefficient is indicated at 0.171, t-value = 0.353, and P ≤ 0.000). This is shown in Table 4.22 and is the model used to study the relationship over the parts that have significance on job satisfaction in educational institutions and to forecast the result of the organisational loyalty in that institution.

This hypothesis explains that the job satisfaction of the combination model helps estimate what can contribute to the organisations' loyalty in that educational institution. job satisfaction has significance on loyalty of the organisation (path coefficient is indicated at 0.152, t-value = 0.236, and P ≤ 0.019). This is shown in Table 4.24. And is the model used to study the relationship over the parts that have significance on the job satisfaction in educational institution and to forecast the result of the organisation's loyalty in that institution.

H10a: Institutional demographics have implications of direct influence on job satisfaction *(the hypothesis H10a is rejected)*.

H10b: Educational structures have implications of direct influence on job satisfaction *(the hypothesis H10b is rejected)*.

4.7 Total effect of the combination model of educational leadership among variables

The total effect from the result of the multiple regression in the structural equation model is presented in table 4.26. Educational leadership shows the most of significant variable affecting (from standardize total effect) the two leadership groups. With a focus on all models, (1) transformational leadership shows the most significant affection to the needs satisfaction construct, and (2) instructional leadership has the most significant affection to the group of loyalty variable. Moreover, needs satisfaction and relationship quality are the most stable significant constructs determining the group of loyalty in the educational leadership model.

Table 4.26 Total effect comparison among educational leadership model.

	Standardized Total Effect		
	TFL	ISL	TFL+ISL
Transformational leadership			
Needs Satisfaction	0.642	-	0.676
Trust	0.658	-	0.454
Commitment	0.586	-	0.049
Job satisfaction	0.619	-	-0.011
Leader loyalty	0.663	-	0.352
Organization loyalty	0.535	-	-0.834
Instructional leadership			
Trust	-	0.661	0.227
Commitment	-	0.603	0.560
Job satisfaction	-	0.656	0.669
Leader loyalty	-	0.663	0.328
Organization loyalty	-	0.597	1.405
Needs Satisfaction ($R^2 = 0.412$)			
Trust	0.295	-	0.262
Commitment	0.423	-	0.420
Job satisfaction	0.291	-	0.264
Trust ($R^2 = 0.478$)			
Commitment	0.132	0.227	0.123
Job satisfaction	0.146	0.177	0.116
Leader loyalty	0.230	0.284	0.217
Organization loyalty	0.122	0.114	0.110
Commitment ($R^2 = 0.449$)			
Job satisfaction	0.391	0.394	0.361
Leader loyalty	0.434	0.437	0.431
Organization loyalty	0.491	0.455	0.441
Job satisfaction ($R^2 = 0.544$)			
Leader loyalty	0.141	0.135	0.136
Organization loyalty	0.276	0.233	0.221
Leader loyalty ($R^2 = 0.614$)			
Organization loyalty ($R^2 = 0.626$)	0.489	0.459	0.504

4.8   Causal relationships among variables

When the method of multiple regression is employed in the analysis and the total effects are compared, the relationships among variables can be used to examine the path of analysis. This is used to test the direct, indirect and total effects of the relationships among the variables. They include the leadership of educational institutions, needs satisfaction, the quality of relationship and loyalty. The results are calculated, categorised and summarized in the form of a table with the indication of causes and effects.

4.8.1   Causal relationships of transformational leadership

Transformational leadership has relationships with every variable in the structure. The direct effect size is needs satisfaction, which is calculated as 0.676. The lowest number is organisational loyalty which is calculated as -1.000. The indirect effect size, which has no value, is needs satisfaction. Meanwhile, the indirect effect size with the highest value is organisational commitment, with a value calculation of 0.318. The lowest is that of job satisfaction which is calculated as 0.113. The total effect size is needs satisfaction with a number of 0.676. In the meantime, organisational loyalty represents only -0.834, which is the lowest number. In sum, Transformational leadership should be the definition of a leader who explores the needs satisfaction of academic employees before expecting other kinds of behaviour.

Table 4.27 Direct, indirect and total effects of independent variables from transformational leadership

Independent Variable	Standardized Total Effect		
(transformational leadership)	direct	indirect	total
Needs Satisfaction	0.676	-	0.676
Trust	0.276	0.177	0.454
Commitment	-0.270	0.318	0.049
Job satisfaction	-0.124	0.113	-0.011
Leader loyalty	0.264	0.087	0.352

Independent Variable	Standardized Total Effect		
(transformational leadership)	direct	indirect	total
Organization loyalty	-1.000	0.167	-0.834
Total	**-0.178**	**0.862**	**0.686**

4.8.2 Causal relationships of instructional leadership

Instructional leadership has relationships with every variable in the structure. The direct effect size is organisation loyalty, which is calculated at 1.052. The lowest number is leader loyalty which is calculated as -0.012. The indirect effect size, which has no value, is trust. Meanwhile, the indirect effect size with the highest value is organisational loyalty, with a value calculation of 0.353. The lowest is that of organisation commitment which is calculated as 0.028. The total effect size is organisational loyalty with the number of 1.405. Trust represents only 0.227, which is the lowest rate. In sum, instructional leadership should be the definition of a leader who explores the organisational loyalty of the academic employees before expecting other kinds of behaviour.

Table 4.28 Direct, indirect and total effect of independent variable from instructional leadership

Independent Variable	Standardized Total Effect		
(Instructional leadership)	direct	indirect	total
Trust	0.227	-	0.227
Commitment	0.532	0.028	0.560
Job satisfaction	0.451	0.218	0.669
Leader loyalty	-0.012	0.340	0.328
Organization loyalty	1.052	0.353	1.405
Total	**2.250**	**0.939**	**3.189**

4.8.3 Causal relationship of needs satisfaction

Needs satisfaction has relationships with every variable in the structure. The highest direct effect size is organisational commitment which is calculated as 0.388. The lowest number is job satisfaction, which is calculated as 0.093. The indirect effect size, which has no value, is trust. Meanwhile, the indirect effect size with the highest value is leader loyalty with a value calculation of 0.237. The lowest is that of organisational commitment, calculated as 0.032. The total effect size is organisation commitment with 0.420. Organisational loyalty represents only 0.110, which is the lowest rate in number. In sum, needs satisfaction should be the definition of the behaviour expected through organisational commitment for academic employees.

Table 4.29 Direct, indirect and total effect of independent variable from needs satisfaction

Independent Variable	Standardized Total Effect		
(need satisfaction)	direct	indirect	total
Trust	0.262	-	0.262
Commitment	0.388	0.032	0.420
Job satisfaction	0.093	0.170	0.264
Leader loyalty	-	0.237	0.217
Organization loyalty	-	0.221	0.110
Total	**0.734**	**0.660**	**1.273**

4.8.4 Causal relationship of trust

Trust has relationships with every variable in the structure. The highest direct effect size is leader loyalty, which is calculated as 0.155. The lowest number is organisational loyalty which is calculated as -0.038. The indirect effect size, which has no value, is organisation commitment. Meanwhile, the indirect effect size with the highest value is organisation commitment with a value calculation of 0.148. The lowest is that of job satisfaction, calculated as 0.044. The total effect size is leader loyalty with 0.217. Organisational loyalty represents only 0.110, which is the lowest

rate in number. In sum, trust should be the definition of behaviour which expects leader loyalty in its academic employees.

Table 4.30 Direct, indirect and total effect of independent variable from trust

Independent Variable	Standardized Total Effect		
(trust)	direct	indirect	total
Commitment	0.123	-	**0.123**
Job satisfaction	0.072	0.044	**0.116**
Leader loyalty	0.155	0.063	**0.217**
Organization loyalty	-0.038	0.148	**0.110**
Total	**0.312**	**0.255**	**0.566**

4.8.5 Causal relationship of organisation commitment

Organisation commitment has relationships with every variable in the structure. The highest direct effect size is leader loyalty, which is calculated as 0.382. The lowest number is organisational loyalty calculated as 0.169. The indirect effect size, which has no value, is job satisfaction. Meanwhile, the indirect effect size with the highest value is organisation loyalty with a value calculation of 0.272. The lowest is that of leader loyalty, calculated at 0.049. The total effect size is organisation loyalty with 0.441. Job satisfaction represents only 0.361, which is the lowest rate. In sum, organisational commitment should be the definition of behaviour which expects organisational loyalty in its academic employees.

Table 4.31 Direct, indirect and total effect of independent variable from organisation commitment

Independent Variable	Standardized Total Effect		
(commitment)	direct	indirect	total
Job satisfaction	0.361	-	**0.361**
Leader loyalty	0.382	0.049	**0.431**

Independent Variable	Standardized Total Effect		
(commitment)	direct	indirect	total
Organization loyalty	0.169	0.272	**0.441**
Total	**0.912**	**0.321**	**1.233**

4.8.6 Causal relationship of job satisfaction

Job Satisfaction has relationships with every variable in the structure. The direct effect size is leader loyalty which is calculated as 0.136. The lowest number is organisational loyalty which is calculated as 0.125. The indirect effect size, which has no value, is leader loyalty. Meanwhile, the only indirect effect size is organisational loyalty with the value of 0.069. The total effect size is organisation loyalty with 0.221. Leader loyalty represents only 0.136, which is the lowest rate. In sum, job satisfaction should be the definition of behaviour which expects organisational loyalty for the academic employees.

Table 4.32 Direct, indirect and total effect of independent variable from job satisfaction

Independent Variable	Standardized Total Effect		
(Job Satisfaction)	direct	indirect	total
Leader loyalty	0.136	-	**0.136**
Organization loyalty	0.125	0.069	**0.221**
Total	**0.261**	**0.069**	**0.357**

4.9 Conclusion

This chapter presents calculations based on the aforementioned methodology. It has employed SEM) as its primary framework to answer the research questions. The objective of this chapter is to confirm that the model that has been created is appropriate with private vocational institutions using dual systems. The results of the analysis are that this model is applicable. Therefore, it has been employed to analyze

the relationship between independent and independent variables and will be discussed in the following chapters.

The results of the thesis are that surveys over the measurement that can be used as research tools. The researcher has employed the method of CFA before examining the structural equation. The model that fits with its use can be employed in the future, as indicated. Accordingly, the relationship of the structural equation can be presented and employed to analyse the influence of each variable as a result of path analysis. The direction and context of the model will be different if the components in the model are separated as a single unit when it is used for analysis. Hence, the results will be different. The researcher has separated the model of transformational leadership and instructional Leadership because the two are influential. If the two are combined, different details of behaviours that influence the variables will be more salient. In short, three models employed in the analysis; all fit with the use of private vocational institutions using dual systems in Thailand.

In conclusion, the variable of leadership in educational institutions is a crucial factor in formulating the behaviour of educational employees. It should be understood that some types of leadership must be put into practice, together with certain kinds of behaviour, as they may lead to other behaviour. The procedure of exercising transformational leadership is interpreted as a method to cope with external circumstances. Instructional leadership, meanwhile, is employed for internal matters. Therefore, the leader must be aware of the contextual changes and appropriate practices that are in line with the policies of the institution.

CHAPTER 5

RESEARCH DISCUSSION AND IMPLICATION

This chapter explains the findings of the study, followed by an analysis and summary of the structural equation modeling (SEM) and the path analysis. The final section presents the recommendations for future research.

5.1 Overview of the study

This study is conducted with the aim of answering the five key research questions as follows: 1) To find which type of leaders can encourage loyalty to executives and private vocational educational institutes in the dual system. The study reveal efficiency of utilizing both leadership models in different circumstances; 2) To present the type of factors contributing to loyalty to leaders and private vocational educational institutes in the dual system. The study analyzed the relationship between mediator variables, namely, needs satisfaction, trust, attachment to educational institutes, and job satisfaction, all of which are behaviors of instructors in educational institutes in the dual system that influenced loyalty in many ways; 3) To apply the dimension of needs satisfaction to connecting with leadership in private vocational educational institutes in the dual system so as to show that such variable is significant to motivating behaviors of instructors; 4) Desirable types of relationships between leaders in educational institutes and organizational context that would enhance loyalty to executives and educational institutes. This part studied direct influences, indirect influences, and overall influences, aiming to explore the objectives of motivating desirable behaviors in educational institutes; and the last one is to apply basic statistics to studying demographic characteristics and qualification of private vocational educational institutes in the dual system that contributed to job satisfaction.

The respondents are the sample serving as instructors in private vocational educational institutes in the dual system who graduated Bachelor's degree or higher,

as well as having a teaching license or specialized trainer license (in the field of industry or liberal arts), and the dual system had to be implemented for more than a year so as to completely gain experiences and meet qualifications in each semester prior to becoming professional instructors and trainers. The contact information of vocational educational institutes is provided by the Office of Vocational Education Commission, consisting of 248 educational institutes registered to implement the dual system. Based on the screening, there are 168 educational institutes implementing the dual system, but only 131 educational institutes had implemented the dual system for more than a year. After the questionnaires are distributed, 57 educational institutes gave feedback to the survey of instructors. Then, the survey is conducted by using the questionnaires.

The goodness of fit is presented by using the validity of questionnaires measured by those specialized in statistics, human resources management, and education. In addition, the confidence level is tested by using testing software. The analysis of results from the data is conducted by using the SEM to test the hypothesis of this study. The statistical software in this study includes SPSS and AMOS. The methodology contains the descriptive statistics. Then, the confirmatory factor analysis (CFA) is made from the questionnaire on factor loading and errors of questions in order to justify the goodness of fit of questions in each variable so as to further analyze the structural equation for conducting the path analysis, aiming to explore whether the model in use achieved goodness of fit. However, the data collection is time-consuming, with a limited number of instruments and time limit, so the testing can be achieved for only 8 key variables, namely, transformational leadership, instructional leadership, needs satisfaction, trust, attachment to educational institutes, job satisfaction, loyalty to executives, and loyalty to educational institutes. The path analysis is a critical way to analyze independent and dependent variables for conducting the regression analysis when finding the relationship in the structural equation so as to lead to the hypothesis testing. The path analysis guideline would reveal the causal inference of each interrelated variable in order to prove the hypothesis which is determined from total 15 component variables out of key variables as mentioned above so as to answer the research questions in this study.

5.2 Summary of findings

This part summarized the findings of the study. There are 2 parts, comprising the construct validity of the research scale, and the SEM. Details are as described below.

5.2.1 Discuss of the construct validity of research scale

This part would present the construct validity from the research scale of variables in the study, including 8 key variables and 15 component variables. The first group is leadership in educational institutes which contains 2 key variables, namely, transformational leadership (TFL) which includes idealised influenced, inspirational motivation, intellectual stimulation, and individual consideration, and instructional leadership (ISL) which includes promoting school-wide professional development, defining and communicating shared goals, and monitors and provides feedback on the teaching and learning process. The second group is the needs satisfaction which includes needs autonomy, needs competence, and needs relativeness. The third group is the relationship quality which contains key variables, including trust, organisational commitment, and job satisfaction. The last group is the loyalty, including leader loyalty, and organization loyalty. The questions before implementing the testing process totaled 105 items.

The structure of the research scale is used to study the relationship between leadership of executives in educational institutes and behaviors of personnel. The outcome of the assessment on goodness of fit and variable & construct validity can be utilized in future studies. During the process of measuring the question construct validity, the director of the Center for Marketing of Industrial Crop Research, the National Institute of Development Administration, and the director of the Office of Vocational Education Commission involved in serving as consultants for inspecting the questionnaires, and conducting a pre-test of the questions (Chapter 3). Then, the questions are finalized, totaling 95 questions, based on the internal consistency measured by Cronbach's Alpha of .70 (Nunnally, 1967). There is a total of 396 sets of questionnaires which passed the criteria from the initial test. Next, greater than 0.50

variables are calculated to be used for testing in the next analysis of the structural equation.

5.2.2 Discussion of the structural equation model (SEM)

The analysis of the structural equation model consists of eight latent variables, namely, transformational leadership, instructional leadership, needs satisfaction, trust, attachment to educational institutes, job satisfaction, loyalty to executives, and loyalty to educational institutes. Each variable can be used as both direct and indirect indicators for measurement purposes.

This study sorts the analysis from component affirmations through the weight measurement, and the model of each group of questions. Each variable is adjusted in order to comply with the analysis of the structural equation. Then, each component is combined into the same model to conduct the path analysis, relying on the principles considering model consistency and which relationship shows the regression equations in order to find the actual relationship of variables. Next, testing continued by calculating the direct influences, indirect influences, and overall influences of each interrelated variable, while placing an emphasis on "goodness of fit" in every structural equation analysis. The results acquired from the model describe these principles. Initially, the weight of key variables from the model, as shown in Figure 4.5, are specified by an indicator, such as transformational leadership, of which predictors contains four component variables, namely, idealized influenced (loading 0.801), inspirational motivation (loading 0.730), intellectual stimulation (loading 0.851), and, individual consideration (loading 1.000). All aforementioned variables show a positive outcome and significant levels that can be applied in the model. The second group of variables includes instructional leadership which contains three component variables, namely, promoting school-wide professional development (1.091), defining and communicating shared goals (0.984), and monitoring and providing feedback on the teaching and learning process (1.000). All of aforementioned variables show a positive outcome and significant levels. Another key variable is needs satisfaction, which contains three component variables, namely, needs autonomy (1.000), needs relativeness (1.089), and needs competence (1.167). Next, the model separates leadership for testing purposes, and the results reveal that

transformational leadership contains predictors of four component variables, namely idealized influenced (loading 0.912), inspirational motivation (loading 0.807), intellectual stimulation (loading 0.956), and, individual consideration (loading 1.000), and needs satisfaction, namely needs autonomy (1.000), needs competence (1.159), and needs relativeness (1.090). All aforementioned variables show positive outcomes and significant levels that can be applied in the model. The instructional leadership model finds that three component variables, including promoting school-wide professional development (1.083), defining and communicating shared goals (0.980), and monitoring and providing feedback on the teaching and learning process (1.000). All aforementioned variables show positive outcomes and significant levels.

When analyzing the relationship of all three models, the explanation of each model can be given as follows: (1) When using transformational leadership together with instructional leadership (TFL+ISL), transformational leadership is influential to needs satisfaction only, whereas instructional leadership is related to job satisfaction and loyalty to educational institutes. Needs satisfaction is related to trust and attachment to educational institutes. Attachment to educational institutes is linked to job satisfaction, while attachment to educational institutes and job satisfaction is related to loyalty of executives and educational institutes; (2) When using transformational leadership (TFL) as an independent variable, the results reveal that it is related to needs satisfaction, loyalty to executives, trust, attachment to educational institutes and job satisfaction. Needs satisfaction is related to trust and an attachment to educational institutes, and trust is related to an attachment to educational institutes. Attachment to educational institutes is related to job satisfaction. Finally, trust, attachment to educational institutes, and job satisfaction are related to loyalty to executives and educational institutes, except that trust is not related to loyalty to educational institutes; (3) only instructional leadership (ISL) is related to all variables, but this model did not have needs satisfaction and only trust has no relationship with job satisfaction and loyalty to educational institutes.

Measuring the "goodness-of-fit" of three models, the internal consistency of all models passed the criteria. Details of each model are as follows: (1) Transformational leadership and instructional leadership (TFL+ISL) show the following results: $x^2/$ df = 2.338; p-value = 0.000; GFI = 0.950; CFI = 0.978; RMSEA

= 0.058; and HOELTER = 220; (2) All of them passed the criteria as follows: chi-square/df not exceeding 5.00; GFI and CFI $\geq$ 0.90; RMSEA lower than 0.08; and HOELTER > 200, (2) transformational leadership (TFL) show the following results: x^2/ df = 2.761; p-value = 0.000; GFI = 0.957; CFI = 0.976; RMSEA x^2/ df = 0.067; and HOELTER = 202, (3) instructional leadership (ISL): x^2/ df = 2.970; p-value = 0.001; GFI = 0.982; CFI = 0.991; RMSEA = 0.071; and HOELTER = 244 Therefore, all models had sufficient consistency for further analysis.

Squared multiple correlation (r^2), which explains the percentage of influence on the variance of variables in three models is different, whereby (1) transformational leadership and instructional leadership (TFL+ISL) show the following results: (1.1) TFL - idealized influenced (59.3%), inspirational motivation (40.0%), intellectual stimulation (57.3%), and individual consideration (68.1%), (1.2) ISL - promoting school-wide professional development (73.6%), defining and communicating shared goals (74.3), and monitors and provides feedback on the teaching and learning process (75.3%), (1.3) needs satisfaction - needs autonomy (40.3%), needs competence (53.4%), and needs relativeness (72.6%) (1.4) relationship quality - trust (49.3%), organisational commitment (47.2%), and job satisfaction (54.7%), and (1.5) loyalty - leader loyalty (61.5%) and organisation loyalty (66.7%). The next model is (2) transformational leadership (TFL) show the following results: (2.1) TFL - idealized influenced (69.8%), inspirational motivation (44.4%), intellectual stimulation (65.7%), and individual consideration (61.7%), (2.2) Needs satisfaction - needs autonomy (40.5%), needs competence (72.1%), and needs relativeness (52.8%), (2.3) Relationship quality - trust (48.4%), organisational commitment (45.7%), and job satisfaction (52.7%), (2.4) - leader loyalty (61.5%) and organisation loyalty (59.0%). The last model is (3) Instructional leadership (ISL) show the following results: (3.1) ISL - promoting school-wide professional development (73.2%), defining and communicating shared goals (74.6), and monitors and provides feedback on the teaching and learning process (76.0%), (3.2) Relationship quality - trust (43.8%), organisational commitment (39.2%), and job satisfaction (54.2%), and (3.3) Loyalty leader loyalty (60.9%) and organisation loyalty (59.7%).

All details involved the models are measured step by step, aiming to explore whether this structural equation modeling can be used for actual measurements. The results of the overall study reveal that all models are consistent and that statistical values show a significant level which can explain the relationship that supports the hypotheses of this study.

5.3   Discussion of research question and hypotheses testing

This section involves a summary and discussion of research questions and hypotheses after conducting the study, as well as the empirical evidence acquired from a statistical analysis of problem-solving.

5.3.1   Research question 1

What kinds of leadership can bring about employee loyalty in a private vocational institution using a dual system?

The responses to this question is acquired from the data collected by the questionnaires, and the analysis of the structural equation is conducted by the path analysis in order to find the relationship to the model. The results are available in chapter four. The answer to this question is comprised of three models in order to express the relationship in each model. The tested model is as shown in Table 4.20, Figure 4.3 (TFL), Table 4.22 and Figure 4.4 (ISL), and Table 4.24 and Figure 4.5 (TFL+ISL).

With regard to the hypothesis 1 – transformational leadership is influential to loyalty, finding indicate only one relationship is significant; transformational leadership is influential to loyalty to executives at path coefficient of 0.249, t-value = 4.408 and P ≤ 0.000. As for the hypothesis 5 – instructional leadership is influential to loyalty, thus there is a relationship between loyalty to executives at path coefficient of 0.229, t-value = 4.105, and P ≤ 0.000, and loyalty to educational institutes at path coefficient of 0.126 t-value = 2.179, and P ≤ 0.01. However, in the case of combining both types of leadership into the same model, transformational leadership has an adverse effect on loyalty to educational institutes at path coefficient of -1.000, t-value = -0.216, and P ≤ 0.030. Only instructional leadership is directly related to loyalty to

educational institutes at path coefficient of 1.052 t-value = 0.230 and $P \leq 0.021$. The said results are consistent with the statistics as mentioned in the previous chapter.

The results of the study on both types of leadership can be explained as follows: (1) Transformational leadership possesses more specific abilities than other people. Transformational leadership is usually fearless of crises and situations, while having interactions with followers. Followers will follow the excellence of leaders and believe that they will lead them to success. The results of the study are in accordance with the study of Wu and Wang (2012) who explain the reason why leaders with transformational leadership apply in the organization and can motivate employees. It is because, apart from outstanding performance, leaders also have an understanding and sympathy for employees, as well as having idealized influence. Normally, leaders wish to lead the improvement of operating results. The simplest concept is to motivate the behavior of employees to become happier as well (Gibson, Dollarhide, Conley, & Lowe, 2018; Kenneth Leithwood & Jantzi, 1999); (2) Instructional leadership is similar to an internal operational guideline for quality improvement. This type of leadership adopts management principles for enhancing employee performance (Brandon et al., 2018). Instructional leadership leads establishing standards and formulating policies to promote a pleasant atmosphere in educational institutes in order to ensure effective learning behavior. When instructors perceive such practice guidelines, they will develop loyalty to executives and educational institutes. According to the study of Aas (2016), personnel in educational institutes believe that executives will improve the organization by creating practice guidelines beneficial for the workplace (Alig-Mielcarek & Hoy, 2005); (3) The combination of transformational leadership with instructional leadership positively affects loyalty to the organization, because it is similar to dealing with problems both internally and externally, so the emphasis is placed on how to achieve work outcomes as required by leaders (Dorenkamp & Ruhle, 2018). Certainly, both types of leaders focus on improving the personnel of educational institutes to achieve their targets, making personnel better understand the organization (Sargeant & Woodliffe, 2007). As leadership have high self-esteem, if leaders had too high an expectation operating results that they neglected how to support personnel's way of life, loyalty to executives will drop (Hart & Thompson, 2007). The answer to this research question

is multiple when applied in practice, but the deepest insight is to selectively use in accordance with the current situation of educational institutes, and educational personnel are considered a key factor in encouraging educational institutes to accomplish practices between internal and external stakeholders.

5.3.2 Research question 2

What factors can develop the loyalty of leaders in a private vocational institution using dual systems?

To answer this question, the researcher uses the relationship quality factors in terms of trust, attachment to educational institutes, and job satisfaction as mediator variables, all of which are related to loyalty. Moreover, these mediator variables lead an independent variable of leadership to have more robust loyalty behavior. The analysis is conducted in Chapter 4 as shown in the summary Table 4.20 and Figure 4.3 (TFL), Table 4.22 and Figure 4.4 (ISL), and Table 4.24 and Figure 4.5 (TFL+ISL).

With regard to the hypothesis 7 – Trust is influential to loyalty to educational institutes, finding some relationships in only (1) The transformational leadership model – trust is influential to loyalty to executives path coefficient at 0.160, t-value = 0.353, and $P \leq 0.000$; (2) Instructional leadership model – trust is influential to loyalty to executives path coefficient is indicated at 0.173, t-value = 0.387, and $P \leq 0.000$; (3) transformational and instructional leadership model –Trust is influential to loyalty to executives path coefficient at 0.155, t-value = 0.335, and $P \leq 0.000$.

For hypothesis eight – Commitment to educational institutes is directly influential to loyalty in the following: (1) Transformational leadership model – attachment to educational institutes is influential to loyalty to executives at path coefficient of 0.379, t-value = 0.843, and $P \leq 0.000$, and loyalty to educational institutes at path coefficient of 0.198, t-value = 0.400, and $P \leq 0.000$. Instructional leadership model – attachment to educational institutes is influential to loyalty to executives of path coefficient at 0.384, t-value = 0.855 and $P \leq 0.000$, and loyalty to educational institutes at path coefficient of 0.187, t-value = 0.381, and $P \leq 0.000$. (3) Transformational and instructional leadership model – Commitment to educational institutes is influential to loyalty to executives at path coefficient of 0.382, t-value =

0.846 and P ≤ 0.000, and loyalty to educational institutes at path coefficient of 0.169, t-value = 0.262, and P ≤ 0.009.

Regarding hypothesis nine – Job satisfaction is influential to loyalty to educational institutes, finds that (1) Transformational leadership model – job satisfaction is influential to loyalty to executives at path coefficient of 0.141, t-value = 0.303, and P ≤ 0.002. and loyalty to educational institutes at path coefficient of 0.207, t-value = 0.433, and P ≤ 0.000; (2) instructional leadership model – job satisfaction is influential to loyalty to executives at path coefficient of 0.135, t-value = 0.283 and P ≤ 0.005, and loyalty to educational institutes at path coefficient of 0.171, t-value = 0.353, and P ≤ 0.000; (3) transformational and instructional leadership model – Job satisfaction is influential to loyalty to executives at path coefficient of 0.136, t-value = 0.282 and P ≤ 0.005, and loyalty to educational institutes at path coefficient of 0.152, t-value = 0.236, and P ≤ 0.019.

Results of the study reveal that the contribution of trust to loyalty places an emphasis on executives. Trust is an agreement made with employees in the organization to make them understand compensation. When employees feel trust in any practice, it becomes an interaction with loyalty. Accordingly, Schrag (2001) states that organizational targets usually come from leaders' ideas based on the principle of compensation when employees agree to perform any action for the organization. Their behavior is supported by benefits. Loyalty is sustainably beneficial despite a lack of service providers. However, employees perceive from generation to generation under relativism who will return positive outcomes. Trust is a pattern of maintaining relationships for common interest, connected with the attitudes of executives, creating value to the organisation and becoming related to loyalty (Aldas-Manzano et al., 2011; Perin et al., 2007). Trust is similar to psychological mechanism that minimizes risks from changes. Behavioral rules are established by individuals (Northfield, 2014). In other words, the effects of trust are connected with loyalty to executives because they are close enough to build relationships rather than the case that personnel in educational institutes follow rules without any control and management.

Next, commitment to educational institutes is related to loyalty to executives and educational institutes. Organisational commitment is the basis of loyalty. It is always possible that attachments affect loyalty to executives and educational institutes

because commotment is derived from an emotion, norm, and attachment in the form of behaviour dedicated to executives and organisational agreements (Cohen, 2007; Ting & Yeh, 2014). Organisational commitment are based on the assumption of organisational resource exchanges with members (Saridakis et al., 2018). Attachments aim at gaining insights into personnel and realizing the value of individualism. When employees dedicate themselves to the organisation, the organisation has to help develop employees. This is partly due to executives or supervisors who observe behaviour and provide assistance, as well as mediating between the organisation and employees, so it is continuously influential to employees and executives. Executives have proactive management, formulating policies and practice guidelines for supporting and changing attitudes from task-oriented to leader-oriented and organisation-oriented through loyalty (Kont & Jantson, 2014). Therefore, the statistical value of loyalty to leaders is higher than that of loyalty to institutes because of a close relationship between employees and leaders. Job satisfaction is one behaviour which helps to improve operating results of the organisation. Employee satisfaction management is a part of administration guidelines that affects loyalty and enhances feelings for promoting work behavior. Particularly in educational institutes, satisfaction does not only affect instructors, but the satisfaction of instructors also positively affects learners. The organisational goal is to achieve a high level of academic achievement, so job satisfaction is related to personnel loyalty. Similarly, based on the organisational management concept of Chang, Chiu, and Chen (2010), satisfaction encourages employees to achieve work efficiency. When employees experience job satisfaction, it enhances loyalty and encourages employees to further improve the quality of their work. The design of guidelines on enhancing satisfaction potentially develops loyalty to executives and educational institutes under the context of operations (Tanford, Montgomery, & Nelson, 2012; Tutuncu & Kozak, 2007). Job satisfaction is perceived when gaining experience in a particular job. Assistance provided by executives or educational institutes leads to smooth operations, benefits for both parties, resulting in the loyalty of employees (Hoyt, 2012; Rojas-Méndez et al., 2009).

5.3.3 Research question 3

Is 'needs satisfaction' necessary in a leadership model to promote behavioral outcomes among employees in private vocational educational institutes using a dual system?

The answer to this question is to consider the relationship of leadership in educational institutes. The researcher found literature relating to transformational leadership helpful. The statistical analysis includes two models. The results reveal that the two models are related to transformational leadership in educational institutes and needs satisfaction. The analysis is conducted in Chapter 4 as shown in the summary Table 4.20 and Figure 4.3 (TFL), and Table 4.24 and Figure 4.5 (TFL+ISL).

The related hypothesis is the hypothesis three – Transformational leadership is influential to needs satisfaction. The results of the relationship are as follows: (1) Transformational leadership model is directly influential to needs satisfaction at path coefficient of 00.642 t-value = 0.911 and P ≤ 0.000; and (2) The combination of leadership model is related to needs satisfaction at path coefficient of 0.676 t-value = 0.987 and P ≤ 0.000. It is thus quite highly influential.

Transformational leadership is related to needs satisfaction because the concept of needs satisfaction is derived from self-decision theory which explains missing needs and growing needs. The mechanisms of living creatures are motivated without satisfaction as they try to achieve satisfaction and fulfill their missing needs (Ryan & Deci, 2017). Enhanced transformational leadership explains improved performance because leaders' requirements are highlighted in accordance with followers' requirements, resulting in multiple outcomes of job satisfaction, motivation, and well-being (Hetland et al., 2011). Employees with missing needs represent the mechanisms of living creatures relevant to their experiences. The organization should have personnel in charge of considering the classification of requirements for all types of people. The qualification of transformational leaders is congruent because of their insights into people and emphasis on individuals working in the organisation. Several studies affirm that the theory of transformational leadership places an emphasis on needs satisfaction based on self-decision theory, which is more specific than psychological conditions that simply focus on explaining employee operating results (Kovjanic et al., 2013). Transformational leadership can

occur in both leaders in the forefront and followers in the rear who support the career path of team members, and try to harmonize the operating system with policies and practices (Boer et al., 2016). Transformational leaders are capable of understanding communications and adapting messages to ensure understanding between the organisation and employees is built (Brandt & Uusi-Kakkuri, 2016; Shih et al., 2012). Although the requirements are varied, leaders should know how to provide assistance and find opportunities to ensure the self-adjustment of all employees by perceiving requirements that lead to individual satisfaction so each individual can successfully produce high-quality outputs for the benefit of the organisation.

5.3.4   Research question 4

What should the direction and quality of relationship be like between the leader and followers so as to bring about loyalty in the organisation?

This question can be connected to three hypotheses. The first two hypotheses directly connect leadership with relationship quality. However, next hypothesis connects to mediator variables, for example, needs satisfaction connected with relationship quality as per the analysis in Chapter 4. Nevertheless, the next hypotheses involved the connection with mediator variables, such as needs satisfaction, connect with relationship quality as per the analysis in Chapter 4 as shown in the summary Table 4.20 and Figure 4.3 (TFL), Table 4.22 and Figure 4.4 (ISL), and Table 4.24 and Figure 4.5 (TFL+ISL).

Related hypotheses include hypothesis two – Transformational leadership is influential to relationship quality as follows: (1) Transformational leadership model is the only independent variable that affects trust at path coefficient of 0.468, t-value = 0.742, and $P \leq 0.000$, commitment to educational institutes at path coefficient of 0.252, t-value = 0.368, and $P \leq 0.000$, and job satisfaction at path coefficient of 0.266, t-value = 0.415, and $P \leq 0.000$; (2) Transformational leadership and instructional leadership – The relationship model of transformational leadership is not influential to relationship quality, but there is a relationship with needs satisfaction as described in hypothesis 4.

The hypothesis six: Instructional leadership is influential to relationship quality: (1) Instructional leadership model is the only independent variable that affects

trust at path coefficient of 0.661, t-value = 1.466 and P ≤ 0.000, commitment to educational institutes at path coefficient of 0.661, t-value = 1.466, and P ≤ 0.000, and job satisfaction at a path coefficient of 0.361, t-value = 0.631 and P ≤ 0.000; (2) Transformational leadership and instructional leadership model – instructional leadership is not related to relationship quality.

Hypothesis four: The needs satisfaction of educational personnel is influential to relationship quality in the following models: (1) Transformational leadership model is the only independent variable, whereby needs satisfaction affects trust at path coefficient of 0.642, t-value = 0.911, and P ≤ 0.000 and commitment to educational institutes at path coefficient of 0.385, t-value = 0.553, and P ≤ 0.000; (2) Transformational leadership and instructional leadership models - transformational leadership affects needs satisfaction in connection with trust at path coefficient of 0.262, t-value = 0.396, and P ≤ 0.000 and commitment to educational institutes at path coefficient of 0.388, t-value = 0.534, and P ≤ 0.000.

The relationship between transformational leaders and relationship quality exists at an organizational and individual level. Relationship quality can be independent or collective, but requires the mutual exchange of benefits (Santouridis & Veraki, 2017; Steward et al., 2010). Transformational leadership explores the relationship with trust, contributions to work efficiency and desirable behaviors (Yıldız & Şimşek, 2016; Zhu & Akhtar, 2014). Trust is the expectation of followers on leaders; an assumption adopted by people in respect of their interactions with other people on the condition that no party is taken advantage of if both parties agreed with the compensation (S. L. Robinson, 1996). When an organisation is successful, members in the organisation should benefit. The capability of transformational leaders encourages the vision of the organisation to become the attitude of employees so as to understand these mutual benefits (Top et al., 2015), resulting in a relationship between leaders and the development of trust. Next, transformational leadership which affects attachments to educational institutes is a voluntary rule, not involving beliefs, but individual decisions. Improved performance has nothing with physical conditions, but involves the atmosphere or guidelines created to motivate employees to be willing to work (Weiherl & Masal, 2016).

The study of Srithongrung (2011) finds that transformational leadership can diversely reflect attachments to an organisation's internal dimensions. Commitment to the organization of employees enables employees to extend their stay in the organisation and attentively work for the organisation as if they worked for their own business. Moreover, employee attachment helps distribute assistance to each employee and eases the administration of the executives or organisation (Han et al., 2016). Job satisfaction responds to work experiences, and arises from an individual assessment of emotions and expressions towards operating outcomes. Therefore, satisfaction varies from individual to individual (Nazim et al., 2016). The relationship between transformational leadership and satisfaction is concealed in a dimension of leadership which connects the specific requirements of each individual because they take control over operations so as to be able to cope with change. Leaders are similar to a bumper for absorbing shock from the outside environment. This type of leadership realizes the connection between work and personal environments (Asencio, 2016; Kenneth Leithwood & Jantzi, 2005). Such leadership contributes to creativity and problem-solving, so executives should not overlook the capabilities of instructors to respond to emotions and feelings linked to behavior.

Instructional leadership is related to trust. Executives at educational institutes make decisions in place of other related persons. Executives are responsible for creating the motivation of all stakeholders to move forward in educational institutes. Building trust to achieve operating targets is effective in linking relationship structures (Gregory, 2017). The capability of instructional leaders is to enhance the performance of instructors and tackle problems within their institutes, as well as ensuring the strength of the institutes (Hallinger, 2003). As a result, in an educational context, when executives trust that instructors will try to enhance learning among learners, trust in the organization is derived from the trust of individuals and persons who cooperate in developing schools and proceed to maintain sustainable relationships with all related persons. Good leadership brings about various types of behavior (Kenneth Leithwood, 2016; Northfield, 2014). Next, instructional leaders are related to an attachment to educational institutes. In this regard, their behavior is expressed as a level of support for educational institutes and an organisationl commitment to colleagues (Sheppard, 1996). Thus, instructional leadership can

manage attachments in the organization. According to the study of Hulpia et al. (2012) who surveyed the relationship and commitments to educational institutes based on the instructional leadership concept, instructional leaders in educational institutes are executives who support the job title of instructors in each section in order to develop and ensure strength, as well as encouraging the cooperation of instructors to their responsibilities for improving the structure and atmosphere of the institutes (Klar, 2012). Leaders can enable educational personnel to understand team work, clear work roles, and targets shared within teams, resulting in attachment to educational institutes and an adverse effect on personnel attachment.

The last relationship is that between instructional leaders and job satisfaction. Instructional leadership is partly to perform duties and handle operations appropriately with educational institutes. When executives acknowledge which resources or requirements are suitable for instructors, they utilize these things to ensure smooth operations, resulting in the increased job satisfaction of instructors. According to the study of Boyce and Bowers (2018), an attempt to manage context makes all people realize their own duties while empowerment increases job satisfaction for non-executives. The study shows that the relationship of instructional leaders is consistent with the study of Dutta and Sahney (2016) who show that executives who plan the career advancement of personnel affects employees' satisfaction, resulting in greater teaching efficiency. This dimension of instructional leadership might have negative outcomes, depending on the environmental impacts in each situation. The management of executives makes personnel feel relaxed at work, as well as experience pleasant emotions as a result of satisfaction (Ilgan et al., 2015).

Needs satisfaction is related to the behaviour of employees and is relevant to emotions which influence motivation. Individual demands are associated with working for one's own sake and for the organisation. They respond to attachments to the organisation which provide them with opportunities as well as job satisfaction (Van den Broeck et al., 2008). In this study, leadership is an independent variable that affects needs satisfaction, so requirements are subject to the decision-making of executives regarding direction-setting. Requirements of executives should be estimated in accordance with the requirements of followers and adjusted in line with cultural requirements/expectations (Hetland et al., 2011). This can have diverse

impacts on job satisfaction and other behaviour, contributing to the well-being of instructors, including trust and loyalty (Deci et al., 2001). Therefore, the effect of variable declaration is in accordance with the study of Stenling and Tafvelin (2014). Needs satisfaction serves as a mediating variable of transformational leadership for enhancing the behavior of employee motivation and the outcomes which conform to the context of educational institutes.

5.3.5   Research question 5

Which demographic characteristics or qualifications of private vocational educational institutes using dual systems lead to increased satisfaction or attachment to educational institutes?

This research question involves hypothesis 10 – That demographic context and structure of educational institutes are related to job satisfaction.

An analysis of demographic characteristics, such as gender, education level, job title, seniority in educational institutes, or service years in a current job finds that there is no statistical significance in all variables and the structure of scale and number of instructors is not statistically significant. Some studies conclude that demographic characteristics possibly have an adverse effect on behaviour, or no effect at all, because the experience of instructors can result in more negative behaviour, or the number of members in the organisation do not help improve the behaviour of personnel (Hulpia & Devos, 2009), or types of school, age of instructors, and open courses might be negatively influential to job satisfaction and trust, or not influential at all (Houtte, 2006). The variables of organisational structures and demographic characteristics in the study are mostly independent variables, because these variables are difficult to relate to other independent variables (Devos, Bouckenooghe, Engels, Hotton, & Aelterman, 2007). Thus, most studies place more emphasis on the attitudes of instructors, who are key factors with more substantial impacts.

5.4   Recommendations for private vocational education policies

The findings of this study indicate that factors affecting loyalty to leaders and vocational educational institutes which include transformational leadership,

instructional leadership, employee behaviour, comprising needs satisfaction, trust, attachment to educational institutes, and job satisfaction are statistically significant, and thus should be applied to reviewing policies of educational institutes and management principles based on the following factors:

(1) *Transformational leadership* in this study is defined as executives' policies adjustment to adjust to changes amid globalization and transformational leadership is the proactive management principle for managing the dual system relevant to experiences in business establishment and the academic principles for enhancing the skills of learners. Therefore, internal management involved training courses or vocational courses provided for instructors to be adjusted to knowledge acquired from the business establishment. The policies of the dual system aim to create and develop manpower ready for the industry, adjust the curriculum to domestic and international economic outlooks so as to deal with manpower shortages and respond to the Skill Development Promotion Act. Dual system management seeks for executive to acknowledge the agreement between educational institutes and instructors for the target accomplishments. However, it is not only the compliance to orders, but the policy seeks to encourage instructors to perceive problems to and increase creativity in skill development, skill training, skill elevation, and career change. Obviously, practice guidelines of instructors experienced dynamic changes in the same way as requirements in the industry, the feedback of educational institutes, business establishments, and public sector actors, including several organizations attended by executives the benefit of both instructors and learners.

(2) *Instructional leadership* is a reactive management style focused on management to achieve the vision of educational institutes. Executives place emphasis on internal programs corresponding to essential knowledge of learners and benefits for businesses of trainers. The management principle is not restricted to only educational institutes, but also covers business establishments. The environment should be properly created to facilitate instructors, and the policy should be formulated to enable instructors and trainers to create knowledge and techniques for learning, and to ensure compatibility with the working system. In addition, reinforcement of instructors should be consistent with educational policies. Key

success factors do not only rely on conducting research studies, but also teaching principles, which maximize the academic achievement of learners. Therefore, the policies of assessments on instructors and learners should conform together, as well as policies concerning monetary and non-monetary compensation and necessary teaching materials in educational institutes

(3) ***Needs satisfaction*** consists of three types: Needs for autonomy –is adopted to create practice guidelines that increase authorization to achieve operational targets. This concept is derived from self-determination theory and based on self-governance. Executives in educational institutes must explore the basic needs of their employees so as to complete their work. In this regard, internal measures refer to planning performance management to ensure improvement and meet standards of the educational institute. Needs for competence – educational institutes should know their actual operating results and doable indicators so that personnel are knowledgeable about their competence and are dedicated to their work, while additional competences refer to employee capabilities beyond the expectations of the organization. Compensation policies or strategies are necessary for human resources development in the organization. Finally, needs for relatedness – teams working in educational institutes should be taken into consideration so as to coordinate the knowledge of each party to achieve better outcomes. Employee relations approaches are adopted to achieve human resources management targets. The creation of a pleasant working environment and an emphasis on team work encourages members in educational institutes to accomplish shared goals.

(4) ***Trust*** is associated with the relationships between each party and expectations of mutual benefit. Building trust reinforces the relationship. Trust contributes to working at full capacity. The planning and designing of human resources policies is significant because the clarification of scope and job description enables instructors to understand working processes. Compensation policies associated with the qualifications of instructors contribute to job security because role-based job descriptions explicitly denote compensation, and educational institutes provide compensation in connection with morale boosting policies which help employees realize their importance. Personnel are a key resource in educational

institutes, and produce outputs for learners. The design of practice guidelines should thus be consistent with the overall operations.

(5) *Commitment to educational institutes* – Executives in educational institutes should create an adjustable culture, consistent with the livelihoods of their personnel. Culture relies on learners and instructors. Executives should thus place an emphasis on team work for the community at large. Educational institutes should review existing policies on how to coordinate benefits for personnel. The formulation of new policy within the dual system have to provide opportunities for each unit of the institute to get involved, so it is easier for employees to make self-adjustments because they are the actors who perceive actual problems. The review of existing policy would enable employees to perceive the movement of educational institutes, so they may start to accept and understand implementation steps and processes. Reduced rules, may lead to the establishment of more agreeable norms. If any changes or problems occur, these personnel would offer cooperation and dedicate themselves to drive the success of the institute.

(6) *Job satisfaction* – Policy formulation involves job feedback and assessment by all stakeholders. The target of these policies is to ensure how to retain employees. Executives must consider how to hire manpower sufficiently for operations or the number of learners in their educational institute, how to plan career development by providing training courses or extensive knowledge in response to economic outlooks, how to survey the requirements of personnel in educational institutes to know how to enhance work efficiency, as well as how to design a work friendly environment. Job satisfaction involves several policies in educational institutes. Executives must prioritize incidents so as to be able to elaborately assess existing human resources and acknowledge operational problems more effectively

(7) *Loyalty to executives and educational institutes* – The cultivation of loyalty includes building multiple components for employees. Employees perform according to the belief that the output of educational institutes is worthwhile and can fulfill requirements, both internally and externally. Executives must initially acknowledge the actual value of jobs and select resources for actual performance management. Managers of each department must inspect any defects in their working

systems and analyze the results for further formulation of management policy. This may affect compensation in the form of specific investment in human capital for knowledge distribution in educational institutes. Loyalty originates in the social exchange process or in the community of practice. Executives have to tackle problems precisely and develop overall guidelines for the security of personnel and educational institutes. Although it is difficult to assess loyalty because it is similar to other behavior, educational institutes should cultivate loyalty for the long-term sustainability of the organization.

5.5 Research contributions

5.5.1 Human resource management contribution

(1) The principle of human resource management is not to take control, but to explore human capital in the organization and manage capabilities for achieving goals. This study reports different outcomes of leadership that affect the behavior of personnel in educational institutes. Executives in educational institutes should foresee the value and role of personnel so as to provide guidelines or resources beneficial for creating a competitive advantage. After proper management patterns are identified, the role of executives is to formulate strategies to make the behavior of personnel match their action plans. Paying attention to the behavior of personnel leads to (1) the perception of the skills of personnel in each unit; (2) the establishment of human resource management systems. Economically, the goals aim at utilizing human capital effectively and making a difference in efficiency. The optimization of leadership encourages personnel behavior to support operations, for example, creating employee satisfaction encourages employees to make self-improvement for excellence and development, improve the environment, or build trust so that each party does not take advantage of others, leading to operational standards, practice norms, and desirable organizational culture, and so on; (3) The creation of sustainability based on an organizational culture managed by the director associated with experience. Executives must possess proper skills for improving the value of human capital so as to create a work culture in accordance with employees and to create a robust culture as a guard to prevent rapid environmental changes. Executives must continue to observe the direction of human capital flow in the organization. Sustainable operating results tend

not to belong to any organization which relies on the same strategy, but an executive's skill helps provide stability for the organization by evaluating how to develop human capital that might minimize difficulties in estimation, possibly using integration as deemed appropriate based on their vision.

5.5.2 Public administration contribution

(1) Governance – This study identifies systematic relationships between executives and personnel, coupled with the context of the dual system, in response to the program management. Executives can make an organization develop when they build cooperation with personnel, as well as enabling personnel to perform self-management to complete their assignments. The management of human capital change practices, such as benefits or welfare, the flexibility of operating plans, restriction of workloads, and so on; (2) The administration of operating results which enhances the relationship of human capital action and the target of educational raises awareness of operating results and context management. Executives and personnel need to understand organizational management and the situations which affect effective self-decision efficiently. Creating desirable behavior helps improve the decision-making capabilities of executives. It is not necessary to utilize only one type of leadership, but to apply the strengths of each type to each situation. Public administration establishes regulations for controlling the operations of educational institutes. If executives encourage personnel to understand the intention of policy, it may expand the viewpoints of all people and support cooperation in the of community of practice. (3) The development of educational institutes considers leadership strategies which develops educational personnel to produce, including educational standards, academic achievements, personnel culture in the organization, or technological management. If all stakeholders gain insights into skills and knowledge, they will be better able to seek resources, or utilize resources effectively. Administration does not come from leaders, but from distributed leadership that shares the understanding and organizational goals with personnel. The outcomes are to utilize knowledge properly, reduce work-related errors, and lead to endless learning. This represents the target of educational institutes which are not dependent upon leaders, but the sustainable management of all sectors.

5.6   Practical implications

The researcher believes that the study on leadership model in educational institutes can respond to the analytical statistics. This research framework can be further applied to other stakeholders. However, some measurements or instruments may have to be adjusted to suit the context due to differences between private and public vocational educational institutes. Experiments in other types of educational institutes may have different outcomes. This study reveals the rationality values of each variable in the theoretical framework. Nevertheless, the statistical research is probably insufficient to interpret executives in educational institutes, and other research methodology may be applied in future research. Therefore, the determination of independent variables in this study had to take the research context into consideration. The context in this study is the dual system.

With regard to the selection of leadership associated with the administration in use, this research applies transformational leadership to survey how to cope with external environments, and applies instructional leadership to the review of internal management. This study aims to explore the relationship between leadership and the behavior of instructors in educational institutes. The findings of the study reveal that each variable in the study has different relationships. The study applies only to private vocational educational institutes in the dual system. If this model is utilized in the future, the variables in the study should be modified in an appropriate manner.

5.7   Theoretical implementation

The leadership theory in this study indicates the extent of management capabilities of executives in educational institutes. Executives are leaders authorized to make decisions and establish implementation guidelines in educational institutes. The implementation objectives, including learners and academic achievements, are the output of personnel in educational institutes. To control personnel, leadership must adjust to context. In general, leaders place an emphasis on the effectiveness and efficiency of learning. The development for high quality personnel is desired by

executives. Enhancing the essential capabilities or experiences of personnel should be implemented by educational institutes. Instructional leadership is an indicator commonly used to conduct studies on executives in educational institutes because the vision, mission, or educational policy is used to develop the questionnaire. The measurement instrument shows the effective use of internal resources or the environment. Instructional leadership theory provides details on whether executives fully perform their duties or inspect practice guidelines to ensure practicality. On the contrary, the transformational leadership tries to perform in another direction; having personnel cope with the external environment and change the system. The proactive management and involved preparation for employees and work attitudes, including an effort to understand the system, from the viewpoint of personnel.

This study found weaknesses of both leadership models. Transformational leadership has management deficiencies specificity because executives have to accurately estimate skills necessary for adjusting to circumstances. This model would not be helpful if the researcher cannot accurately estimate leadership-induced behavior. In comparison, more complex behavior like 'needs satisfaction' are taken to affect group behavior of relationship quality. Needs satisfaction is a part of self-decision theory which mainly focuses on personnel requirements rather than developing the desirable behavior of personnel. Therefore, transformational leadership has to estimate and interpret the context before determining behavioral dependent variables prior to implementation. Instructional leadership usually focuses on policies of educational institutes, so it is easy to estimate the outcomes because the formulation of policy clearly indicates what is needed to be exchanged between personnel and educational institutes. Another aspect is to survey the roles and duties of executives. Executives determine policies or practice guidelines. The answer may be identified from the policy, rather than from exploring the operations of executives. Furthermore, instructional leadership does not respond to knowledge development, but to ensure personnel are able to rely on existing regulations of educational institutes. In case of any substantial change, work efficiency might decline. As already mentioned, the overall models are clearly influential to behavioral variables.

However, both leadership models are independent variables suitable for understanding what personnel in educational institutes encounter. Considering paths

in both leadership models, there is no personnel development because changes in the educational system are actually sensitive, and internal system management, in a simultaneous manner, places a heavy burden on personnel. Thus, the findings of the study clearly indicate that personnel face difficulties at work. As such, practice guidelines should be improved appropriately to context and personnel in educational institutes. Although the context of private vocational educational institutes using a dual system is controlled by public administration, the communication capabilities and management flexibility of leaders is beneficial to selecting proper qualifications for further adjustment and revision in an accurate manner.

5.8 Limitations of the research.

There are five total limitations of the research based on the literature review and the research as follows:

(1) SEM is tested by the confirmatory factor analysis (CFA). Because these factors are known confidence levels and the construct validity of the questions in each factor are calculated so as to match the context of this study, before conducting the CFA between variables. It is possible that the exploratory factor analysis (EFA) would be more suitable for the context in this study. Inferential statistics are necessary in the latter case. The limitation includes the long period of time required to conduct the research and errors in the latent variables. The next issue is the multivariable analysis which is rather specific to the variables and models of structural equation analysis. Statistical analysis in other types of variables apart from the measuring instrument and frequency must be calculated. The last limitation is the logical complement of the education of personnel in Thailand is considered as statistical support, possibly relying on a qualitative study to support future findings.

(2) Data collection in this study notes that dual systems are newly established. Some educational institutes have to develop and support public relations in order to make learners understand the benefits of this system. As learners in private vocational educational institutes have not realized this necessity, data collection is affected. Because some vocational educational institutes have implemented the dual system for some time, but there are no students, instructors cannot deploy the policies of

executives. As a result, the data in the study contains fewer samples. Educational administrations will be able to maintain the standards as long as these are actually implemented. All stakeholders have to practice and understand the system accurately so as to maximize benefits for learners. The difference of the dual system application in each area results in different outcomes.

(3) In this study, the capability of executives is a limitation of contributing leadership to the behavior of instructors in educational institutes. Because dual system guidelines in each vocational educational institute have not been clarified, the management of change in transformational leadership may be partially involved in the management of programs in educational institutes, which requires management from instructional leadership. In addition, the application of leadership may be more diverse because, despite the flexibility of management systems in the private organizations, the dominant context is the administration by the Office of Vocational Education Commission, Ministry of Education, which is influential to the behavior of instructors. The indication of the proper behavior of leaders might require more literature review, relevant to the educational institutes.

(4) Mediator variables in use are subject to constant change. As such, the application to each situation possibly results in more diverse behavioral outcomes, based on leadership which itself leads to multiple influences. The development of the model has many options for further development according to the current situation. The consideration of options to be used in other contexts should re-consider the variables.

(5) The limitations of the questionnaires: Several questions may lead to some items containing repetitive meanings, affecting the construct validity and confidence levels for testing the questionnaire. In case of being reused in the study, the results of the study may be different. The next study should review the variables in the study and repeat the statistical testing.

5.9 Recommendations for future research

The findings of the study reveal that the structural equation analysis, inferential statistic, and analysis of variance can summarize the direction of additional research in the future and the contribution to better research findings.

(1) The variables of leadership in educational institutes includes the following: (1.1) Transformational leadership consists of the influence of ideology, inspirational leaders, intellectual stimulation, and individual sympathy, each of which affects operations. The dual system leads to changes which affect all personnel in an organization. The guidelines to be developed should be the attitudes of executives in educational institutes, which are expressed as feedback to the public sector after contributing transformational leadership to the behavior of employees so that the Ministry of Education can be informed of the effect of the implementation of the dual system; (1.2) Instructional leadership includes development of schools for personnel advancement, definitions and communication, and the review of learning outcomes. The findings suggest that the knowledge of executives is necessary for the administration of vocational educational institutes in a dual system. The concept of stimulating knowledge creation and distribution regarding the extension of the dual system is necessary for personnel in educational institutes and work quality improvement. Future research, based on the research methodology involved in using the research instrument to test leadership will be appropriate to different contexts. This study investigates the dual system in private vocational educational institutes. The researcher perceives that due to future changes in other educational institutes in other contexts, the educational sector will further develop this model to improve educational personnel in the future.

(2) Based on additional literature reviews, finds that the cross-section study would reveal several variables affected by the leadership because of changing research approach and more self-development of personnel, and the fixed formula leading to desirable behaviors of personnel in educational institutes contains more diverse factors as well. The cross validation of each variable is varied by the particular context. Future researches might combine multiple types of educational

institutes so as to make a comparison and know key success factors for high quality educational personnel in Thailand.

(3) Based on the aforementioned recommendations, SEM is tested to find the goodness of fit. The next development is to increase the variables relevant to personnel development, such as human resource development strategy, the outside environment – culture, technology, or society, etc., or the concepts or theories of knowledge management, social exchange theory, or quality improvement in educational institutes. By exploring the connection and rationality of each variable through the literature review in order to find more complex dimensions to adjust the theoretical framework to the more complex context.

(4) The development of the theoretical framework may disperse the behavior of learners or stakeholders relating to educational institutes in the dual system. Moreover, it also affects the operating results of the organization, including academic achievements, monetary and non-monetary outcomes of educational institutes, and the further development of behavioral concepts. The researcher believes that the clarification of the definition of each variable in the theoretical framework can support various alternative outcomes that will enhance the efficiency of the leadership model.

(5) The in-depth interview with executives, instructors in educational institutes and instructors in business establishments is necessary to support program development properly, with learners in vocational educational institutes, as well as to help propose opinions from actual implementation as a form of feedback to all related sectors. With the survey of comprehensive potential motives of personnel behavior, it may be possible to conduct surveys and develop outcomes that contribute to new knowledge which can improve educational curricula in accordance with the externa and internal environments, more efficiently and effectively.

5.10 Conclusion

This study aims to answer the research questions laid out herein regarding the relationship of each variable, namely, the relationship between leadership in educational institutes and needs satisfaction, relationship quality, and loyalty in the

context of private vocational education using the dual system, in Thailand, explore the direct and indirect effects of leadership in educational institutes of multiple forms of behavior, and use factors associated with the organization and educational institutes to find the outcome of personnel behaviour in educational institutes using the dual system.

The analysis in Chapter 4 presents empirical evidence that the variables in use can be assessed by the statistical instruments. In conclusion, the study affirms the theories applied in the theoretical framework. Then, the SEM is analyzed to explore the goodness of fit between the model and the information by assessing the relationship between the variables of leadership in educational institutes, that is; needs satisfaction, relationship quality, and loyalty. This study explores the goodness of fit of the models in order to confirm the researcher's estimations, as well as applying AMOS to analyzing the predetermined research hypotheses.

Therefore, this chapter summarized the results in terms of the answers to the research questions based on the empirical evidence from the statistical analysis in relation to the research hypothesis, as well as providing policy recommendations, implications, limitations, and ideas for future research.

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APPENDICES

Appendix A: Background and the significance of the dual system of vocational education in Thailand

Thailand put in place standard regulations in the managing the dual system of vocational education since October 17, 2013. They are to build and maintain relationships between vocational institutions and state-owned enterprises or government agencies. In managing both programs offered by vocational institutions and practical training courses, state-owned enterprises or government agencies usually assess all vocational graduates and the qualities of their work in both technical and technological levels based on professional standards and subject competencies. The standards and competencies are aligned to the country's national economic and social policies. Parliament specifies learners' qualities; program structures; instructor qualifications; supporting resources; types of academic institutions; companies; trainers in companies; and other requirements together with assessments as well as quality assurance (the government gazette following the notification of the Ministry of Education regarding the standard of dual systems of education management, 2014). The salience of these elements is derived from the vocational education system in Germany which focuses on knowledge acquisition from academic institutions and real-world experience, gained from working in companies.

Wheelahan (2015) proposed an important concept of knowledge which encourages management teams and academic staff of academic institutions to understand vocational education and training (VET). This is because VET allows learners to apply their knowledge at work; build their experience; and work while learning. Some may think that VET is suitable for learners with unique perceptions or those who are unsuccessful in traditional academic institutions. Thus, VET is considered an important alternative to tackle inequality in society and provides opportunities for these people who have been given inequalities to create products. Despite the fact that vocational students are more on the academic track than the

specific purposes track, the current design of vocational programs leads people to think of vocational students as being on the specific purposes track. In fact, both tracks should be encouraged equally. This is because vocational education programs can drive the labor market and be an alternative for learners who do not fit within the general education system. Vocational education systems, thus, should collaborate equal amounts of knowledge and internships into each program. Durkheim (1992/1956) divided knowledge into two stages: understanding knowledge, and developing innate knowledge (i.e., that which comes naturally or is shaped by society) from personal experiences. Durkhiem's concepts highlight work-in-progress knowledge, which is considered as an important role in possessing knowledge. It means that knowledge is built from the collaboration of place and time. Apart from this role, normative forms of knowledge are another role of knowledge stressed by Durkiem. It is to create a road map for a society. Bernstein (2000) explains that knowledge is necessary for democratic systems. An individual should have the right to understand and attempt to reach the impossible. He or she should exhibit skills—social, critical thinking, and cultural, as well as his or her personality and participate in activities or choose not to. Consequently, vocational learners have the right to participate in societies and join their own professions. In developing one's surroundings it is necessary to use specific knowledge. Learners should understand the voices of the majority and of the own voice in selecting knowledge since the education system is always different in terms of types of knowledge and groups of learners. Knowledge can thus be divided into two types: specific purposes knowledge and conceptual knowledge that learners gain from schools, colleges, and universities which are different from everyday knowledge (Young, 2013).

The system used in the Northern part of Europe is called the dual system. The dual system originated in Germany. This vocational education system reflects the education system that is related to labor market. It is a transition system referring to vocational institutions' sustainability and structural management which are different in each society, according to economic conditions, and political situations. The middle variable here is the learners, who are still young and active and who will become an important resource in the future market. For the UK, Australia, and USA, this vocational system is being paid less attention. When the learners seek cooperative

education or engage in internships, they usually work with organizations that require low levels of skills. Consequently, when they graduate, they are more likely to get jobs that are not exactly mapped with their qualifications. This leads to inequalities in the education system because the learners have not had an opportunity to apply what they have learnt in class to the real world and they are prevented from gaining further experience in the work place. Thus, vocational programs should be set to allow learners to map their in-class knowledge with their basic job knowledge and everyday lives. The vocational system can actually attract more learners than that of the general education system because it focuses on skills. It could be said that the importance of knowledge in any education system is to know the function of knowledge or algorithms of how knowledge works in each particular field of study, inferential relations, knowledge assessment steps, and how to gain new knowledge. The difference between vocational and general education systems lies in their knowledge structures. The knowledge structures of the vocational education system is known as competency-based training, or CBT, which allows its learners to pre-practice, integrate, and synthesize their knowledge with real work experience. Consequently, the general education system follows suit. The system has started to adapt its structure to CBT.

Remington (2018) reported that those involved in the network of the dual system, from the government and vocational institutions to the employers, have attempted to make the system a success. They set the system to be of use for technical and vocational education and training or TVET. The dual system is a collaboration between vocational institutions and companies in emphasizing dynamic skill practices to suit economic changes or fluctuations. The system supports sustainable professional skills so that its recent graduates can enter the labor market more effectively. When the skills needed are not relevant, it is necessary to look closely into the economic levels which are aligned with the dual system. The three economical levels are in focus: (1) macro level; (2) meso level; and (3) micro level. The macro level is the economic level in which business sectors, labor sector, and the government collaborate to distribute the costs and advantages in doing internships evenly. The meso level refers to a more regional level in which industrial sectors and labor associations act as representatives of their organizations in order to complete

their public roles. The micro level focuses on the companies, vocational institutions, and other stakeholders in the dual system. When applying the dual system in each country, it is necessary to consider the education policies and conditions of the labor market to enable more salient connections of domestic and regional sectors or stakeholders. Moreover, persuasion and motivation from the country leaders to develop skilled labor and to equalize resources, which are part of economic development, is a must. That is to say that internal structures in the country and local companies can strengthen the country's competitiveness. Although it can be viewed that social and economic conditions prevent the flow of labor, other types of education systems may also be considered as obstacles. One solution to this point is the concept of the career-plus-college. This concept encourages learners to fulfill their internships and helps build experience and lead learners to a clearer and matching work path. Vocational institutions will apply the concepts to their current programs and train their staff members to understand and involve learners' developments according to learners' preferred professional schemes. In order to efficiently map the algorithms of the dual system and surrounding context, collaboration between employers and government agencies with vocational institutions (as their mediators) should be initiated. One important role of the dual system is that it should be the base of vocational institutions and companies which maximizes the qualifications of young learners and equips them to be ready for their future careers. The size of the training sections for these young learners are another issue of focus. When big companies accept learners for their training activities, they should allow more steps in training. This enables each individual learner to gain comprehensive training. The training trends should be geared towards more adaptive competencies which allow each learner to go with the flow and not become too static. It is necessary for every sector, including vocational institutions, employers, the government agencies, and other stakeholders to work together in order to efficiently manage the dual system and to build the system's credential and trust. When it is solid, the labor that one country has will be qualified one, which will strengthen the country's economy. Thus, collaboration among stakeholders, in order to manage these labor resources for long-term economic commitment, should always be considered. The model of how to collaborate is as follows.

High

Degree of
inter-firm
coordination

Consortium model:
Sectoral association sets
occupational standards;
Aligns VET with industry
needs in multi-school
consortia

Solidaristic model:
Strong sectoral organizations
overseeing standards, VET;
Centralized cooperative
bargaining over skill formation.

Liberal model:
Competitive market for labor;
Competitive market for VET;
Multiple bilateral school-firm
agreements

Parental model:
dominant firm invests in
proprietary training (foreign
investors; defense industry)

Low

Low   High
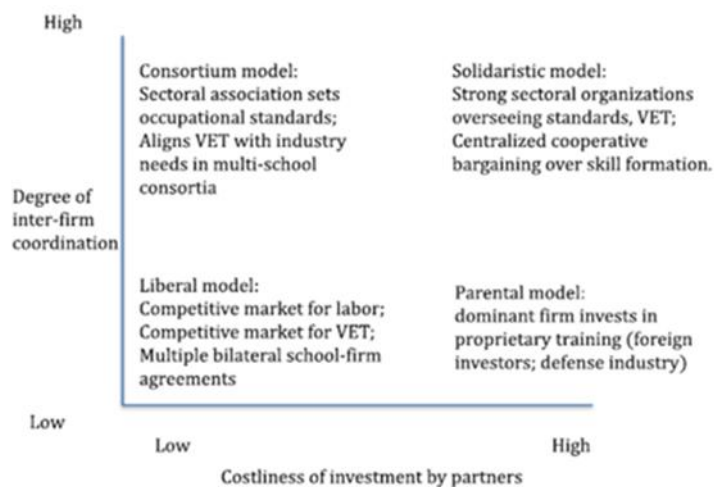
Costliness of investment by partners

Figure: Dimension TVET Partnership

Source: Remington (2018, p. 507)

The importance of the dual system lies in the relationship of learners and stakeholders of institutions, such as companies where the learners work or others which relate to external factors (e.g., the labor market; economic or political conditions). Ziderman (1997) states that economic conditions could give more importance to the dual system. Secondary technical systems, as well as the vocational education or STVE, occur because of the economic system. Such systems needs labor and governments, especially in the developing countries, need to manage young workers who are unemployed. Such systems demand development in skilled labor for the industrial sector. In some countries, the dual system is employed to provide learners real-life working skills. Thus, the growth of vocational education systems in many countries around the world, including Thailand. The success in the expansion of the vocational education system originates from organizations which demand specific skilled-labor. Vocational education can be a great helping hand in training skilled labor for the needs of the market which experience constant change. It can thus be said that the main factor that allows STVE be successful is the economic context. When the learners graduate, they can be more powerful assets than those who graduate from the general education system as they have equipped themselves with work experience and thus, they are guaranteed to be employed as soon as they graduate. However, relying on one skill practice is not effective when there is a

change in the job or major technological advancement. Thus, in the dual system, learners should be trained to appropriate objectives. This is to properly and effectively manage the skill of labors in the future. Many governments around the world have attempted to set this as a goal in an attempt to reduce layoff ratios in young workers and to allow learners to study less in class. The latter is to allow more time for young people to practice skills that their future employers need. Moreover, governments have also attempted to increase the wages of some low-paid professions. At this point, responsiveness should be discussed. Responsiveness refers to the increasing importance of flexible needs and the reaction to any changes in skills. This is needed in studying the vocational education system. To revolutionize the system, it should begin with building understanding and focusing more on changing internal systems. Although the strategic development of professional skills has already been efficient, it can always been improved altogether with the programs offered in order to respond to the needs of employers. Government agencies will also need to oversee the programs offered. The preparation of skilled labor, according to market demand or the basic skill practices, may not be enough for an industrial revolution, innovation in processing products, or new technology for better environmental changes. The proper adaptations either in learning by working, skill building, repetitive training, and other necessary activities are always a must. The management of vocational education' policies is, thus, involved with learners who will need to choose what they want to achieve at the professional level. Then, the customized programs for learners will allow them to be equipped with professional skills that are in demand and to be ready for the labor market. One way of helping learners to reach their professional goals is for vocational institutions to conduct surveys on employers and also on graduates. This is to make sure that all graduates in the dual system enter the labor market successfully and if changes should be made to the programs offered to help the next batches of graduates gain similar success. Vocational education programs should be related to external efficiency which is a key indicator of labor market fluctuations or changes. The programs should also be considered according to internal efficiency, which allows vocational institutions to prepare their learners for their career preferences as well as the labor market and its changing economic conditions. This is relevant to Hoxtell (2018)'s statement. Hoxtell stresses that learners choose their

academic institutions because of their relationships with workplaces, psychological aspects, social conditions, and the business dimensions relevant to economic conditions. Thus, when learners select their academic institutions, they usually choose those in which learners can become a part of the organizations in the future. The selection of learners may be different according to their learned and accumulated skills. The dual system highlights the importance of internships selected by the learners. Without proper internship placements and because of the social and economic fluctuations, many graduates may not be able to locate a job. The dual system comes to the rescue of such problems. Learners and interns' satisfaction depend on the job offers companies provide rather than what the vocational institutions have set for them.

Learners' decisions are another factor to consider. In order for them to select where to have their intern placements under the dual system, personal impressions towards the companies are important. Such impressions stem from interviews with the companies to the learners' senses, such as visualization or hearing. This allows prospective interns to feel that the companies care for them and really want to train them. Another kind of sounding-out occurs from the prospective interns' vocational institutions through which they provide orientation and preparation prior to placements. It can be said that doing internships is based on the skill, knowledge, and attitudinal factors of the learners. Besides, other elements, such as work location and working atmosphere are also external factors that can affect the prospective interns' emotions at work, either for them to feel comfortable or stressed. More factors involved in the selection of job placement for interns include the following; contact, which allows them to gain easy access to their future career paths; prospects, which refers to learners' expectations to work at the same place they do internships; payment which should be enough to cover their living conditions; the sizes of the workplace, which enables interns to access more work resources which maximize their potentials in learning from the workplace in many dimensions; the prestige of the workplace attracts social acceptability, thus, entices many interns to do internships in particular companies; personal characteristics also affect the ways in which learners select their internship placements; future apprentice occupations can also be said to impact decisions in selecting placements; secondary school education is another factor many

interns use to make their decision on their placement; student or apprentice status is considered to create the working atmosphere, as well as set clear working hours. All of these factors are what many learners consider in order to make informed decisions on their own, or through their networks', about their internship placements.

Rukumnuaykit and Pholphirul (2016) state that Thailand has given its support to its skilled labors and vocational education and that groups of skilled labors are important to Thailand's economic situation. In Thailand, educated individuals spend 14-16 years through their general education or vocation education. Some may spend approximately 11 years in technical colleges. Those who are in the vocational education or technical college system are the majority. When they locate their jobs, they have the highest ratio at 67.6 percent, compared to those who graduate from the general education or university system at 20.4 percent, and those from the primary school level at 12 percent. For business training, it is found that those who are graduate from the general education or university system have had their trainings at five percent as compared to those from vocational education or technical college system at one percent. When they have such trainings, it usually occurs in the public sectors, at 53 percent and 31 percent for the private sectors. This reflects the fewer applications in the vocational education system. Many learners apply more for the general education or university system as wage or salary increases offered to graduates from this system are higher. Thus, the vocational education under the dual system, which focuses on specific knowledge and practical skills, is an alternative for those who want to increase their wages and salaries. This is to say that vocational education under the dual system will need to adapt itself based on the economic fluctuations and competitiveness in the global market. It should focus on providing more specific skills in demand and on limiting the constant high costs of setting up the dual system which has been affected by the aforementioned external factors (Cockrill & Scott, 1997).

Appendix B: The use of the dual system in many countries

Dual system education was introduced in several forms. Such systems originated in Germany as the model system taken from its vocational education system and applied to general education (Deissinger, 2004). Cockrill and Scott (1997) state that the dual system is used at the secondary level of education when the learners are at the age of 10. It is considered as an important base for learners to plan their professional track. Learners' parents can also be involved in making decisions on which system of education their children should pursue. There are three systems of education: Gymnasium; Realschule; and Hauptschule. Gymnasium refers to the secondary school system in which the learners need to pass Abitur prior to acceptance into higher education. The internship at this level will later lead to doing internships in a high professional path, such as banking and finance, which the learners need to adhere to the higher education's regulations and assessments of quality. Realschule refers to the system in which the learners will get their intern placements to gain real work experience. The learners must be older than 16 years of age. They can choose to do their internships full time or to later go back to the Gymnasium system. Those returning to such system receive a university diploma. Nonetheless, it is quite unlikely to get the diploma because of several requirements which are difficult to follow if the learners are not that young. Hauptschule is the system which accepts learners from the age between 15 and 16 years up. Learners are trained on the vocational education system and usually have difficulties in coping with other people in society or find that the regular system of education is not right for them. When they graduate, they will do an internship, and are more likely to go on to vocational education, or to extend their studies in Realschule to gain their university diplomas or their work qualifying certificates. In some cases, some learners may prefer to not work after graduation. Hauptschule has its advantages, providing a more flexible option for learners to learn in Hauptschule for two years and to transfer to either Realschule for another two years or to Gymnasium for their diplomas.

The timeline in studying in the dual system and vocational school or Berufsschule is between three and 3.5 years, or could be shorter, depending on the selected track. Generally, the learners spend three days at the companies of their

placement and the rest of the week in the classroom. The learners will usually gain many insightful suggestions and comments in their professional selections and develop a clearer view on current professional trends. This system of education is considered suitable for two groups of learners. One is the group of learners who cannot find their internship placements or who are not in the mechanical track, such as those in health care. The other is the group of learners who fail to get their diplomas when entering the intermediate level of study. These diplomas are equivalent to the diplomas offered at the Realschule. Besides, in the dual system for vocational education, such a system offers a general education. It is called Berufliches Gymnasium or Fachgymnasium, for which the timeline of study is three years. Learners spend these three years to study foundational courses in technology and professions which lead them into engineering or business professional tracks and allow them to go for Abitur. The Abitur is the gateway before the learners can gain their high professional certifications and t certified reports of having completed the dual system education. These learners will have their choice in going for two types of practices. One is called Berufsvorbereitungsjahr, in which learners will be able to engage in general professional training. The other is called Berufsgrundbidungsjahr, which is geared towards learners' specific professional training. It is considered normal if the learners of this group are not able to find a suitable intern placement or if they are exempted for their internships during the first year of study since their goals are more specifically set. Nonetheless, both groups of learners need to spend at least one year in the classroom to prepare for their internship placements.

The participating companies or organizations will always be those that are registered with and have paid fees to the chamber of commerce (Kammer). The fees cover employer training programs and other compensation incidents, such as not getting extra payment from training the interns. Although the paid fees are required for the participating organizations and for the Laender-style-schools in which they offer various tracks of studies, not every organization in Germany allows internships. When doing internships, organizations will always set strict rules and regulations about timelines, work certificates, and also Meisters, who are the mentors of the interns at work. Another case study in focus is the difference in dual system management. Although learners will spend two years in their internship, it is not a

guarantee of getting a job after graduation. This is a problem the government is facing and may reduce the motivation of interns. It seems that organizations' responsibility to keep their interns motivates and maximizes their abilities. However, many organizations will not risk investing large sums into training interns without any success. One more studying-while-training style of education in Germany which deserves to be highlighted is called 'Volkschochschulen'. This refers to an off-the-job style of education which allows those who begin to see the importance of coming back to the workforce to gain training for their future work plans or businesses. This is called Continuing Education and Training (CET).

The reasons why Germany has made CET a success because it can be put to work in real professional contexts. Lewis (2007) explains that Germany places more importance towards the dual system more than the general education system. The sustainability of the dual system is that its labor union also pushes the system to the front as the foundation of the country. The union has come to the agreement that skilled labor that graduates from the dual system is far more unique than regular labors. Therefore, to effectively reform the vocational education system of many countries based on the German model, the country should begin with the connection between society, the workplace, and the economy of the country. The public sector, industrial systems, and education system needs to ready (Dessinger, 2000). Other stakeholders should be clearly informed to get involved.

When Thailand employed vocational education under the dual system, its objective was to map this type of education system with its economic policy through collaboration with Germany. Thailand has an MOU, dated October 2012, in academic collaboration with Germany with its focus on the dual system. Later, another MOU signed with DIHK on January 2013 was signed to support a professional credential approval system and vocational education programs. Many Germany-based companies have followed suite to initiate MOUs with Thailand and its universities. An MOU called the German-Thai Dual Excellence Education, signed on 16 May 2013, is a significant MOU which should be mentioned. The MOU agreement allows BMW, Bosch, and B. Grimm, which are prestigious Germany-based companies to collaborate with universities in Thailand to help these universities develop their dual systems. With the constant collaboration between the German-Thai chamber of

commerce and GIZ, one of the international organizations of Germany, Thailand has gained significant advantages through experience in managing this kind of education system from the country of origin. It has applied the model in many technical colleges and increased the numbers of skilled labors in Thailand allowing it to fill labor demands in both the private and public sectors. It has also driven the country towards economic growth and enabled it to prepare itself as a member of the ASEAN economic community where it expects to attract many foreign investors, especially those from Germany. The dual system is regarded as an effective and efficient education system which responds to the labor market and can enable Thailand to become an international hub of vocational training under the dual system.

The dual system of education based on the German model has been introduced and used in many other countries in Europe, America, and Asia. Each country has gained advantages from the system, but has also faced limitations. China, for example, has encountered some limitations in operating the dual system extensively across the country. Some studies have compared and contrasted the Chinese dual system of education with that of the German system. The studies show that differences in their social, economic, and cultural systems have prevented the dual system from being successful in certain areas of China. The suggestion is that in order to make it a success, strong collaboration among all stakeholders is necessary, and the vision will need to be adjusted. Another point of failure of the system in China is because the Chinese do not pay much attention to blue collar workers and tradesmen. The system has been used with the general education system for higher education. Based on Confucian belief, vocational learners are perceived as laborers and all laborers are believed to not use their brains to work but their physical bodies. With this kind of belief, many parents are not invested in such a vocational system of education. However, with economic fluctuations and social change, China is moving towards a new industrialized society where skilled labors are in demand. The vocational education system, thus, has gained an important status, especially with learners who come from the rural areas to look for internship jobs in the cities. However, its drawbacks are that, for the companies participating in the system, training cost per intern is high, and for the interns the pay is often low. In China, the three levels of vocational education are divided: elementary; secondary; and higher

levels. The elementary level refers to learners whose knowledge backgrounds are at the elementary level. It will take them 3-4 years to complete their certificates from the Ministry of Labor or from local institutions. These learners can have their internship placements in agricultural, entry level, or selling related jobs. The secondary level refers to learners whose knowledge backgrounds are at the secondary level. It will also take them 3-4 years to complete their certificates from the Ministry of Labor or from local institutions. These learners can have their internship placements in industrial, technological, or management-related jobs. The higher level refers to learners whose knowledge backgrounds are at the higher level than the other two. These learners can have their internship placements in professional level jobs and they will also put into practice moral and other high-skilled practices to work in teaching, technological advancement related jobs, or in universities which include vocational institutions. It will take them five years to complete this level of study. It can be said that obstacles preventing China to applying the German vocational education system extensively involve the complete access to stakeholders and learners themselves, cultural values, and working systems. The solution could be that China begins to see the importance of new labor, allows more grants to be given to vocational education funds, and revises the payment regulations to enable those who graduate from vocational education systems to receive higher wages (Barabasch, Huang, & Lawson, 2009).

The case of China highlights key adaptation steps to successfully apply the German model of vocation education system, the dual system. They borrow model steps which focus on partial model borrowing, then the pilot borrowing model step, which pays attention to the trials, and later the steps of customization to allow the system to fit into the country's culture. Conceptual borrowing, however, according to Lewis (2007), is not enough. This is because conceptual borrowing is considered as the ideal. For Germany, the dual system may prevent labor market inequality. But this is not true in China due to its strong Confucian cultural values. Thus, the hybridization of the model seems to be an alternative in order to put the dual system into its full use and use advantage seen in other countries. The case of China reflects two sides of culture where borrowing the dual system can turn into success when utilizing (a) partial borrowing, using VET as a bridging gap towards the university

entrance; (b) pilot borrowing, which allows trials of the system in certain places and later expands into success-areas; (c) customization or a globalized system; or (d) conceptual borrowing, which allows the main concepts to still be the stands, such as the concepts of the dual system that enables young labors to move forward in their future careers through collaboration between the industrial sector and the vocational institutions. However, (d) should be used with precautions.

A case study by Helms Jørgensen (2013) suggests that the dual system and stakeholders can be obstacles in applying the system in other countries. In Denmark, the system and all stakeholders can work together harmoniously. This remarkable example stems from the fact that country use its apprenticeship model to allow learners to understand more about the systems while acknowledging current labor market trends. Its training focuses on socialization to enable learners to cope with other people in the workplace. This comes with transparency, allowing both vocational institutions to work together with the companies of their choice. This system truly supports learners' professional sign posts. All stakeholders are seen as social partners with different vocations or occupations, values and ways of living. Consequently, vocational education under the dual system in Denmark can be considered as an interdisciplinary collaboration.

Another point of focus on is the smooth transition from being in school to being a working adult. This seems to be the new culture of people in the new generations who prefer to work without schools or who are out of school and involved in social activities. All of these reasons slow down the success of the dual system. Thus, to enable a smooth transition from being in school to being working adults and to avoid individual and other social traps, some issues need to be considered. The first is the transition of socio-economic positions from interns to full-time employees. Second is the transition between stages in the life and family position; from learners to the heads of the families. Third is the transition of identity from learners to working adults. To allow this, all stakeholders will need to implement the following: (1) an employment system which relates to the labor market. This is to say that the system emphasizes professional competency while trying to relate personal issues with the need to work; (2) the labor market should be set to protect the benefits to society. The market should offer internship placements and give rights to laborers as well as reflect

concern towards society; and (3) an education system in which vocational institutions align with accredited educational programs and allow professional experience, to enhance important skills in each education track.

For other case studies, evidence of cultural adjustments is evident. European countries, USA, and Australia are prime examples, where education focuses on technology. In these countries, vocational education is primarily offered in the form of internships, amateur training or community studies, to prepare their learners for higher education. These forms are similar to those in the UK where there are six vocational education forms offered. These are; general education; adult learner education; specific education in agriculture; specific education in arts; specific education in design; and specific education in performing arts. However, vocational education in the US focuses on the college level and offers professional training track between 40-60 percent. In the US, it is respected among community educational leadership, where learners are the college director and its vice director. Here, the system of education focuses on the learner's cultures. The change in the leader's characteristics often depends on context and labor market requirements. Such change also requires moral decisions (Crossman & Cameron, 2014). China is another example of cultural context dependence wherein its education system is strongly tied to its cultural values and practical conditions which limit the advantages of the dual system. Furthermore, its economic and social conditions, which are geared towards its agricultural culture, slow down the processes of the dual system in trying to drive learners into industrialized fields. All of these differentiate China from European countries and the US when it comes to the management of the dual system in which the latter countries have received wider recognition and been more successful.

Appendix C: Survey (items measuring of questionnaire)

This questionnaire is divided into 2 parts. The first part deals with characteristics of dual system and organizational structures. The second part focuses on demographic and relational factors.

The information you have shared with the researcher today will be for the use of this study and for academic purposes only. The personal information will be kept confidential. The use of other information you provide will be for the purpose of developing the dual system in any participating vocational institutions.

Part 1: Items measuring characteristics of dual system and organizational structures

1. Characteristic of cooperated enterprises in dual system (possible choose more than 1 option)

☐ Manufacture industry   ☐ Textile industry   ☐ Arts

☐ Home economics   ☐ Business administration   ☐ Agriculture

☐ Fisheries   ☐ Tourism industry

☐ Information technology and communications

2. The total number of instructors (exclude directors or school principals)..…persons

3. Criteria of instructor in school

☐ Pass the level of Thailand Professional Qualification.

☐ Professional Development course (more than 40 hours/semester)

☐ Arrange training course in institution (2 hours/semester)

4. Criteria of coach/trainer/mentor in enterprise/firm

☐ Pass knowledge appraisal course for coaching in enterprises.

☐ Profession training (more than 30 hours/year)

☐ Experience of trainer in corporate (more than 6 months)

5. The total number of students in dual system (each institute)

☐ Vocational certificate level ……….. student

☐ High vocational Certificate ……….. student

6. Intuitional size (depend on the number of students in institute)

☐ Small (≥ 1,000 students) ☐ Medium (1,001-2,000 students)

☐ Large (≤2,001 students)

Part 2: Items measuring demographic and relational factors.

Part 2.1: Demographic information

| Gender | ☐ Male | ☐ Female | ☐ Other………. |

| Age | ☐ between 21-30 | ☐ between 31-40 | ☐ between 41-50 |

☐ between 51-60 ☐ 61 and over

| Education | ☐ Bachelor degree | ☐ Master degree | ☐ Doctoral degree |

☐ Other……...

Job position ☐ Instructor / Teacher (only) ☐ Supervisor / Director

☐ Operation and Other (include teaching) ……………..

Seniority in Academic (year)

☐ between 1-5 ☐ between 6-10 ☐ between 11-15

☐ between 16-20 ☐ 21 and over

Tenure in current position (year)

☐ between 1-5 ☐ between 6-10 ☐ between 11-15

☐ between 16-20 ☐ 21 and over

Part 2.2: Relational factors.

The questionnaire used Likert scale, ranging from 1 to 5 in which (1) absolutely disagree, (2) disagree (3) neutrally (4) quite agree, and (5) referred to extremely agree.

Transformational Leadership

1. The administrative team has clearly explained the values or missions of your vocational institution that are related to concepts of dual system.
2. The administrative team has given reasons of why the dual system should be aligned with set objectives of the vocational institution.
3. The administrative team has made any reasonable and logical judgments based on good morals.
4. The administrative team has acknowledged and pay more attention to the institution's missions which allow their applications to the dual system of the institution.
5. The administrative team makes you feel proud when working together.
6. The administrative team focuses on collective gains rather than those of the individuals.
7. You have your respect for the administrative team when working together.
8. The administrative team has shown their energy and pride when working to integrate the dual system in your institution.
9. The administrative team is energetic in fulfilling gaps towards a complete dual system in your institution.
10. The administrative team has gained your attention to help them by linking missions of the institution with the dual system to reach the institutional goals.
11. The administrative team has shown confidence that the team can accomplish the works according to the concepts of the dual system.
12. The administrative team has been able to analyze and think thoroughly when any controversies or problems regarding the dual system occur.
13. The administrative team has had better solutions for controversies or problems regarding the dual system than for those regular ones.

14. The administrative team has made you aware of the contextual solutions of each dual system's problem.

15. The administrative team has always suggested some guidelines of the dual system to you so that any given works will be done properly.

16. The administrative team has spent time to train you on current responsibilities or new responsibilities regarding the dual system.

17. The administrative team is always being friendly with you

18. The administrative team has always focus on individuals' needs.

19. The administrative team has supported you to realize your strengths and potentials when teaching in the dual system in your institution.

Instructional Leadership

1. The administrative team has supported professional development for instructors to reach the institution's missions in becoming a vocational institution using the dual system.

2. The administrative team has provided more opportunities to you in professional development by offering internal training programs for effective teaching-learning environment in relation to the dual system.

3. The administrative team has set professional development plans for instructors and to which they suit the instructors' needs.

4. The institution has customized its professional development plans for each instructor.

5. The institution is ready to support their instructors in any professional development aspects.

6. The institution is ready to provide useful resources and tools towards professional development of its instructors according to the dual system, such as research data system; teaching and learning materials; or qualifying supporting staff.

7. The administrative team has set clear plans in collaboration with instructors to involving with professional development according to the set dual system.

8. In assessing qualities of the programs in the dual system, the administrative team has based them on in-class and out-of-class activities to efficiently improve learners' qualities.

9. The administrative team has supported learners to gain knowledge and how to use informational technology to further the learners' academic skills in the dual system.

10. The administrative team has collaborated with the instructors to reach the institution goals by providing staff access to research database and that of the dual system.

11. There are clear communication processes in the institution to allow staff to fully understand academic goals of the institution which are aligned with the dual system.

12. The administrative team has collaborated with the instructors in providing inputs for assessing qualities or each program under the dual system. This is for the results to be use in the institution's development.

13. The administrative team always has its respect towards the institution's goals when the team needs to make decisions about academic issues, programs, and the dual system.

14. The administrative team has made its constant progress in managing the vocational education under the dual system. This is to serve the learners' expectations.

15. The learner assessment level has been in great quality.

16. The administrative team has occasionally observed the classrooms or the companies the learners have been accepted to work for. This is to be certain that both classroom management as well as the organizations are following the structures of the dual system.

17. The administrative team has involved in inspections of classroom or organization practices to make sure that every activity is aligned with programs' regulations and those of the dual system.

18. The administrative team has collaborated with the learners, such as academic competitions; academic field trips; or national academic assessments.

19. The administrative team has usually spent time working on campus.

20. The administrative team has paid more attention to the importance of the instructors' development plans. The instructors are allow to adjust themselves to the dual system properly and not just that they can follow the regulations of such system.

21. The instructors' assessments have been performed to develop the programs according to the dual system.

22. When the instructors have achieved their goals, the administrative team has always reacted positively, such as giving them positive assessments, paying them compliments, or providing some incentives.

23. When the learners have reached their academic goals, the administrative team has always reacted positively, such as paying them compliments, honoring them as excellent students or providing them some scholarships.

Needs Satisfaction

1. You feel comfortable in being yourself at work. You can exhibit initiatives at work in completing your given tasks that would be aligned with the dual system or without having to have someone control you.

2. You feel that you have abilities, competencies, knowledge, and skills in working under the dual system.

3. You have empathy, sympathize, and understand the process of collaboration in the dual system.

4. You feel that you do not possess any ability or are not good at any working activities when it comes to working under the dual system.

5. You can always give suggestions when any problems or important obstacles arisen in working under the dual system.

6. You feel a great distance when working with the administrative team under the dual system.

7. You feel that you have potentials and efficiency in working under the dual system.

8. You are close to the administrative team in your institution and are familiar with collaborations with other administrative teams in other vocational institutions under the dual system.

9. You feel that in working under the dual system you have a lot of pressure and are forced to work according to the administrative team rather than using your creative thoughts in completing your assigned tasks.

Trust

1. You expect that the administrative team will work together with you in the same direction and the success will be achieved through the collaboration.
2. You believe that the administrative team has motivations and good intentions in collaboration with every staff member.
3. You do not think that the administrative team is biased against you or other staff members who work together.
4. You feel that the administrative team is sincere and determined.

Job Satisfaction

1. You feel that you love the job the you are currently doing.
2. You feel that the work you do every day is tedious.
3. You feel satisfied with the work you have done.
4. You think that your current job is good.
5. You think that your current job is a creative job.
6. You feel that your current job is respectful.
7. You feel that your current job is popular in the labor market.
8. You enjoy working at your current job.
9. You think that your job contributes to many other people and yourself.
10. You feel that your current job enables to you gain prosperity and promotion.
11. You feel that your current job is challenging.
12. You feel that your current job requires intelligence in managing works and responsibilities.
13. You feel that your current job is simple.
14. You feel that your current job will lead you to have a success in life.

Organizational Commitment

1. You feel good to contribute more to your institution than to your own pleasure. This is for your institution to become a prototype of the dual system.

2. You always talk to your colleagues in this institution that it is great to work as a teacher here.

3. You have quite a loyalty to this institution when it is under the dual system.

4. You always welcome any given responsibilities and ready to complete them according to the institution's goals, such as the dual system setup; extra work apart from teaching loads; overtime works; or shift rotating.

5. You acknowledge that your values and those of the institution are alike, just as both have the same work focus.

6. You feel good to tell other people that you are an important part of this institution.

7. You think that you can work successfully anywhere under the condition that the type of job is the same.

8. You know that changing work roles is not the reason for you to resign.

9. You feel better and prouder when you work here and not at any other workplace.

10. You feel that there is no obligation for you to work longer at this institution.

11. You agree with the institution policy that pay extra care to its staff, such as incentive policy; Human Resources development policy; or staff ratio policy.

12. You have faith in this institution. For instance, you believe that the institution will lead its staff and learners toward success. Or, the success of this institution is the success of every staff members.

13. You feel that you gain the best opportunity in working for this institution.

14. You think that your choice in working at this vocational institution is considered your failure and you need to fix it.

Leader Loyalty

1. You think that the academic success gained is because of the collaboration between you and your administrative team under the dual system.

2. You praise the institution's success in managing the dual system. When you meet your colleagues or friends, you usually say that such a success has come from the administrative team.

3. You feel that you are given compliments when other people from other workplaces praise your administrative team.

4. You feel that you have had co-values between you and your administrative team from the day you started to work at this institution.

5. You have respected your administrative team because of the determination and goal-oriented visions.

6. You are authorized to work in the dual system without any monitoring from your administrative team or your direct boss.

7. You know that you can work excellently and effectively as a subordinate.

8. You feel good to try every way possible to make your assigned tasks from your administrative team or your direct boss a success.

Organizational Loyalty

1. When you think of academic works or teaching about the dual system, you will always think of this institution.

2. You always praise your institution when you talk to internal staff and also other people outside of the institution.

3. You feel good to suggest and persuade other qualified people to work at this institution.

4. You feel good to suggest and persuade interested or prospective students to study at this institution.

Appendix D: Survey (Thai version)

แบบสอบถาม

เรื่อง การศึกษาภาวะผู้นำในสถานศึกษาที่มีอิทธิพลต่อพฤติกรรมบุคลากร ตามการบริหารอาชีวศึกษาภาคเอกชนในระบบทวิภาคี สังกัดสำนักงานคณะกรรมการการอาชีวศึกษา

แบบสอบถามจัดทำเพื่อการศึกษาภาวะผู้นำในสถานศึกษาที่มีผลต่อพฤติกรรมบุคลากรในสถานศึกษาอาชีวศึกษา ตามระบบทวิภาคี ภาคเอกชน โดยการวิจัยครั้งนี้เป็นส่วนหนึ่งของการศึกษารัฐประศาสนศาสตร์ดุษฎีบัณฑิต สาขาบริหารทรัพยากรมนุษย์ สถาบันบัณฑิตพัฒนบริหารศาสตร์

ผู้วิจัยขอความอนุเคราะห์ผู้ตอบแบบสอบถามที่ให้ความอนุเคราะห์ เสียสละเวลาตอบแบบสอบถาม แบบสอบถามนี้แบ่งเป็น 2 ส่วน ได้แก่

ส่วนที่ 1 แบบสอบถามลักษณะของระบบทวิภาคีและ โครงสร้างองค์การ

ส่วนที่ 2 แบบสอบถามเกี่ยวกับลักษณะทางประชากรศาสตร์และปัจจัยในตัวแบบความสัมพันธ์

ข้อมูลที่ท่านได้อนุเคราะห์จักนำเพื่อใช้ในการศึกษาเท่านั้น และข้อมูลที่ท่านให้คามร่วมมือจะถูกเก็บเป็นความลับ จึงขอขอบพระคุณทุกท่านมา ณ โอกาสนี้

คำตอบที่ได้จากแบบสอบถามความคิดเห็นในครั้งนี้จะถูกเก็บเป็นความลับ ข้อมูลที่ได้รับถือว่าเป็นสิทธิส่วนตัวของผู้ตอบและนำไปใช้ในภาพรวม มิใช่ส่วนบุคคลโดยข้อมูลที่ได้รับจะนำมาใช้ประโยชน์ในเชิงวิชาการเท่านั้น พร้อมทั้งนำข้อมูลเหล่านี้มาใช้ในหน่วยงานภาครัฐเพื่อพัฒนาและปรับปรุงการการศึกษาระบบทวิภาคี ให้เกิดคุณค่ากับสถานศึกษาที่เข้าร่วมต่อไปในอนาคต ขอรับรองว่าคำตอบของท่านจะ ไม่ส่งผลต่อสถานศึกษาและตัวท่านเป็นอันขาด จึงขอขอบพระคุณท่านมา ณ โอกาสนี้

<u>ส่วนที่ 1 คำชี้แจง</u> โปรดทำเครื่องหมาย ✓ ลงใน ☐ ที่ท่านต้องการเลือก โดยตอบเพียงคำตอบ
เดียว

1. ประเภทสาขาวิชาของสถานศึกษาที่ร่วมมือกับสถานประกอบการในระบบทวิภาคี (เลือกได้
มากกว่า 1 ข้อ)

☐ วิชาอุตสาหกรรม   ☐ วิชาอุตสาหกรรมสิ่งทอ   ☐ วิชาศิลปกรรม

☐ วิชาคหกรรม   ☐ วิชาเกษตรกรรม   ☐ วิชาประมง

☐ วิชาพาณิชยกรรม / บริหารธุรกิจ   ☐ วิชาอุตสาหกรรมท่องเที่ยว

☐ วิชาเทคโนโลยีสารสนเทศและการสื่อสาร

2. จำนวนผู้สอนในสถานศึกษา (ไม่นับรวมผู้อำนวยการหรือผู้บริหาร) ....ราย

3. เกณฑ์ของผู้สอนในสถานศึกษา

☐ มาตรฐานคุณวุฒิตามระดับ   ☐ ผ่านการพัฒนาวิชาชีพตามเกณฑ์ที่กำหนด (40 ชม/ ภาค
การศึกษา)

☐ สถานศึกษาจัดอบรมถ่ายทอดทักษะให้ผู้สอน (2 ชม/ ภาคการศึกษา)

4. เกณฑ์ครูฝึกในสถานประกอบการ

☐ ผ่านการทดสอบประเมินความรู้เพื่อเป็นครูฝึก

☐ ผ่านการฝึกอบรมการเป็นครูฝึกในสถานประกอบการ (30 ชม)

☐ มีประสบการณ์สอนในสถานประกอบการ (ไม่น้อยกว่า 6 เดือน)

5. จำนวนผู้เรียนที่อยู่ในระบบทวิภาคี

5.1 ระดับ ปวช. มีจำนวนผู้เรียนในระบบทวิภาคี ....ราย

5.2 ระดับ ปวส. มีจำนวนผู้เรียนในระบบทวิภาคี ....ราย

7. ขนาดของสถานศึกษาอาชีวศึกษา (วัดตามจำนวนนักเรียน)

☐ ขนาดเล็ก (ไม่เกิน 1,000 ราย)   ☐ ขนาดกลาง (1,001-2,000 ราย)

☐ ขนาดใหญ่ (มากกว่า 2,001 ราย เป็นต้นไป)

<u>ส่วนที่ 2:</u> คำถามเกี่ยวกับภาวะผู้นำทางการศึกษาที่มีอิทธิพลต่อความต้องการความพึงพอใจ คุณภาพความสัมพันธ์ และความจงรักภักดีในสถานศึกษาอาชีวศึกษา ภาคเอกชน

<u>คำชี้แจง</u> ส่วนที่ 2.1 กรอกรายละเอียดเกี่ยวกับผู้ตอบแบบสอบถาม

      ส่วนที่ 2.2 โปรดทำเครื่องหมาย ✓ ลงใน ☐ ที่ตรงกับความเห็นท่านเพียงคำตอบเดียว

2.1 คำถามเกี่ยวกับผู้ตอบแบบสอบถาม

เพศ   ☐ ชาย   ☐ หญิง   ☐ อื่น ๆ..........

อายุ   ☐ ระหว่าง 21-30 ปี   ☐ ระหว่าง 31-40 ปี   ☐ ระหว่าง 41-50 ปี

           ☐ ระหว่าง 51-60 ปี   ☐ 61 ปีขึ้นไป

ระดับการศึกษา ☐ ปริญญาตรี   ☐ ปริญญาโท   ☐ ปริญญาเอก

           ☐ อื่น ๆ ....

ตำแหน่งงาน ☐ ผู้สอน (เพียงอย่างเดียว)   ☐ หัวหน้าหรือผู้จัดการ (รวมหน้าที่งานสอน)

           ☐ ผู้ปฏิบัติการและอื่น ๆ (รวมหน้าที่งานสอน) ....

อายุงานในสถานศึกษา (ปี)

           ☐ ระหว่าง 1-5 ปี   ☐ ระหว่าง 6-10 ปี   ☐ ระหว่าง 11-15 ปี

           ☐ ระหว่าง 16-20 ปี   ☐ 21 ปีขึ้นไป

อายุงานในตำแหน่งปัจจุบัน (ปี)

           ☐ ระหว่าง 1-5 ปี   ☐ ระหว่าง 6-10 ปี   ☐ ระหว่าง 11-15 ปี

           ☐ ระหว่าง 16-20 ปี   ☐ 21 ปีขึ้นไป

2.2 ท่านคิดว่าปัจจัยต่อไปนี้มีความสำคัญมากน้อยเพียงใด

ปัจจัยในตัวแบบความสัมพันธ์ภาวะผู้นำทางการศึกษา	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
ภาวะผู้นำแห่งการเปลี่ยนแปลง (transformational leadership)					
1. ผู้บริหาร อธิบายชัดเจนเกี่ยวค่านิยมหรือพันธกิจของสถานศึกษาที่เกี่ยวข้องกับแนวทางของทวิภาคี					
2. ผู้บริหาร อธิบายให้ทราบเหตุผลว่าระบบทวิภาคีควรสอดคล้องกับวัตถุประสงค์ที่สถานศึกษากำหนด					
3. ผู้บริหาร ตัดสินใจสถานการณ์อย่างเป็นขั้นตอนด้วยความเป็นธรรมหรือยึดมั่นในศีลธรรมอันดี					
4. ผู้บริหาร รับรู้และให้ความสำคัญกับพันธกิจที่กลุ่มที่ต้องนำไปประยุกต์ใช้กับระบบทวิภาคีในสถานศึกษา					
5. ผู้บริหาร ทำให้ท่านรู้สึกภาคภูมิใจเมื่อได้ทำงานร่วมกัน					
6. ผู้บริหาร เล็งเห็นประโยชน์ส่วนรวมที่จะได้รับมากกว่าประโยชน์ส่วนตนในสถานศึกษา					
7. ผู้บริหาร สร้างความนับถือให้กับท่านเมื่อร่วมทำงานด้วยกัน					
8. ผู้บริหาร แสดงออกถึงพลังและความมั่นใจในการทำงานเมื่อมีการปรับระบบทวิภาคีเข้ามาในสถานศึกษา					
9. ผู้บริหาร มีความกระตือรือร้นที่จะทำงานของสถานศึกษาให้สอดคล้องกับระบบทวิภาคีให้มีความสมบูรณ์แบบ					
10. ผู้บริหาร เชื่อมโยงวิสัยทัศน์ของสถานศึกษาให้ท่านรู้สึกสนใจที่จะร่วมมือเพื่อปรับใช้แนวทางทวิภาคีกับสถานศึกษาให้สัมฤทธิ์ผล					
11. ผู้บริหาร แสดงออกให้ท่านมั่นใจว่าสามารถดำเนินงานทำตามแนวทางทวิภาคีได้สำเร็จอย่างแน่นอน					
12. ผู้บริหาร วิเคราะห์ประเด็นเมื่อมีปัญหาหรือสถานการณ์เกี่ยวกับระบบทวิภาคีที่ส่งผลต่อสถานศึกษาได้อย่างถี่ถ้วน					

ปัจจัยในตัวแบบความสัมพันธ์ภาวะผู้นำทางการศึกษา	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
13. ผู้บริหาร มีวิธีการแก้ไขปัญหาของระบบทวิภาคีใน สถานศึกษาที่ได้ผลลัพธ์ที่ดีกว่าวิธีแก้ไขปัญหาทั่วไป					
14. ผู้บริหาร ปลูกฝังให้ท่านรู้จักใช้ตระหนักถึงวิธีในการ แก้ไขปัญหาของระบบทวิภาคีได้ตามสถานการณ์					
15. ผู้บริหาร แนะนำมุมมองต่อทำงานใหม่ให้แก่ท่านเสมอ เพื่อให้งานที่ได้รับมอบหมายนั้นลุล่วงไปด้วยดี					
16. ผู้บริหาร ใช้เวลาสอนหรือฝึกฝนท่านให้เชี่ยวชาญในงาน ที่ทำหรืองานที่ไม่เคยทำมาก่อนกับระบบทวิภาคี					
17. ผู้บริหาร ทำงานร่วมกับท่านด้วยความเป็นกันเอง มากกว่า การคิดว่าท่านเป็นสมาชิกในกลุ่มเท่านั้น					
18. ผู้บริหาร คอยสำรวจบุคลากรที่ทำงานร่วมกันในระบบทวิ ภาคีว่ามีความต้องการที่แตกต่างกันในกลุ่มการทำงานปกติ					
19. ผู้บริหาร ช่วยเหลือท่านในการหาความถนัดในหน้าที่การ งานของท่านเมื่อมีการจัดการเรียนการสอนด้วยระบบทวิภาคี ในสถานศึกษา					
ภาวะผู้นำเชิงวิชาการ (instructional leadership)					
1. ผู้บริหาร สนับสนุนผู้สอนให้สนใจการพัฒนาอาชีพ ต่อเนื่องตามเป้าหมายที่ได้กำหนดไว้ในสถานศึกษาที่เป็น ระบบทวิภาคี					
2. ผู้บริหาร เพิ่มโอกาสในการพัฒนาอาชีพด้วยการจัดอบรม ภายในเพื่อให้มีการพัฒนาหลักสูตรการเรียนการสอนที่ดีและ สอดคล้องกับระบบทวิภาคี					
3. ผู้บริหาร วางแผนพัฒนาผู้สอนให้เป็นไปตามระบบทวิภาคี และความต้องการผู้สอนเองในการปฏิบัติกิจกรรมของ สถานศึกษา					
4. สถานศึกษามีแผนพัฒนารายบุคคลให้มีการสนับสนุน					

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	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
ความก้าวหน้าในอาชีพ					
5. สถานศึกษามีความพร้อมในการส่งเสริมผู้สอนสู่แผนพัฒนาอาชีพ					
6. สถานศึกษามีความพร้อมในการจัดสรรทรัพยากรและเครื่องมือที่พร้อมที่มีประโยชน์ต่อก้าวหน้าทางอาชีพตามระบบทวิภาคี เช่น ระบบข้อมูลวิจัย สื่อการเรียนการสอนหรือความพร้อมของบุคลากรด้านต่าง ๆ					
7. ผู้บริหารมีการกำหนดแผนที่ชัดเจนในการร่วมมือกับผู้สอนเพื่อพัฒนาอาชีพตามหลักสูตรทวิภาคีที่กำหนดไว้					
8. การพิจารณาหลักสูตรตามระบบวิภาคีในแต่ละครั้งมีการใช้ข้อมูลในชั้นเรียนหรือกิจกรรมเพื่อนำไปปรับปรุงผลสัมฤทธิ์ของผู้เรียนให้ดีขึ้น					
9. ผู้บริหารส่งเสริมให้รู้จักใช้ข้อมูลสารสนเทศเพื่อความก้าวหน้าทางวิชาการของผู้เรียนในระบบทวิภาคี					
10. ผู้บริหารมีการร่วมมือกับผู้สอนเพื่อให้บรรลุเป้าหมายสถานศึกษา ด้วยการพัฒนาข้อมูลวิชาการให้เข้าถึงบุคลากรทุกภาคส่วนและระบบทวิภาคี					
11. มีกระบวนการสื่อสารภายในสถานศึกษาให้เข้าใจชัดเจนถึงเป้าหมายทางวิชาการที่ต้องสอดคล้องกับระบบทวิภาคี					
12. ผู้บริหารร่วมมือกับผู้สอนในการเอื้ออำนวยข้อมูลการประเมินตามสาขาวิชาที่มีการจัดศึกษาทวิภาคีเพื่อนำผลลัพธ์ไปพัฒนาสถานศึกษา					
13. ผู้บริหารยึดเป้าหมายของสถานศึกษาทุกครั้งที่มีการตัดสินใจที่เกี่ยวข้องกับวิชาการ หลักสูตรและระบบทวิภาคี					
14. ผู้บริหารมีการยกระดับทางการศึกษาอย่างต่อเนื่องเพื่อให้เป็นไปตามความคาดหวังของผู้เรียนที่อยู่ภายในระบบทวิภาคี					

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	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
15. เกณฑ์การประเมินความสำเร็จของผู้เรียนอยู่ในระดับที่สูงขึ้นอย่างต่อเนื่อง					
16. ผู้บริหารมีการเยี่ยมชมการเรียนการสอนในชั้นเรียนหรือสถานประกอบการเป็นบางครั้ง เพื่อให้มั่นใจว่าเป็นไปตามหลักสูตรทวิภาคี					
17. ผู้บริหารมีส่วนร่วมในการตรวจสอบแนวปฏิบัติในชั้นเรียนหรือสถานประกอบการว่าเป็นไปตามข้อกำหนดหลักสูตรและระบบทวิภาคี					
18. ผู้บริหารทำงานด้านวิชาการร่วมกับผู้เรียน เช่น การประกวดแข่งขันวิชาการภายใน ทัศนศึกษาด้านวิชาการ หรือการสอบประเมินความรู้ทั่วประเทศ เป็นต้น					
19. ผู้บริหารใช้เวลาทำงานในสถานศึกษาเป็นส่วนมาก					
20. ผู้บริหารให้ความสำคัญของแผนพัฒนาผู้สอนตามทวิภาคีมากกว่าที่จะประเมินเพื่อตัดสินตามระบบทวิภาคี					
21. การประเมินผู้สอนเพื่อมุ่งเน้นให้เกิดการพัฒนาในหลักสูตรวิชาการตามระบบทวิภาคี					
22. เมื่อผู้สอนมุ่งมั่นในการทำงานเพื่อให้บรรลุผล ผู้บริหารมักมีผลตอบรับ เช่น การประเมินในเกณฑ์ที่ดี คำชมเชยหรือผลตอบแทน เป็นต้น					
23. เมื่อผู้เรียนมีความพยายามในการศึกษาจนสัมฤทธิ์ผลผู้บริหารมักมีผลตอบรับ เช่น การชมเชย การยกให้เป็นแบบอย่างที่ดี หรือทุนการศึกษา เป็นต้น					
ความพึงพอใจตามความต้องการ (needs satisfaction)					
1. ท่านรู้สึกอิสระในการแสดงออกถึงความเป็นตัวเองในการทำงาน อย่างการทำงานได้เอง โดยที่ไม่มีผู้ใดมาควบคุมหรือบังคับในงานที่ได้รับมอบหมาย หรือมีแนวทางเป็นของ					

ปัจจัยในตัวแบบความสัมพันธ์ภาวะผู้นำทางการศึกษา	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
ตนเองในการทำให้หลักสูตรทวิภาคีที่ปรับเข้ากับแบบปกติ					
2. ท่านรู้สึกว่าท่านเป็นคนมีความสามารถ สมรรถนะ ความรู้ และทักษะในการทำงานในระบบทวิภาคี					
3. ท่านรู้สึกเห็นใจ ห่วงใยและมีเข้าใจในการทำงานร่วมกัน ในระบบทวิภาคี					
4. ท่านรู้สึกว่าไร้ความสามารถหรือไม่ดีพอเมื่อทำงานเกี่ยวกับ ระบบทวิภาคี					
5. ท่านสามารถพูดได้เสมอเมื่อมีปัญหาหรือเหตุการณ์สำคัญที่ เกิดขึ้นอันเป็นอุปสรรคในการทำงาน และท่านสามารถออก ความเห็นเพื่อเสนอหนทางในการแก้ไขปัญหานั้นได้ด้วย เช่นกัน					
6. ท่านรู้สึกว่ามีระยะห่างในความสัมพันธ์ระหว่างผู้บริหาร หรือหัวหน้าฝ่ายในระหว่างการทำงานภายใต้ระบบทวิภาคี					
7. ท่านรู้สึกมีศักยภาพและมีประสิทธิภาพในการทำงาน ภายใต้ระบบทวิภาคี					
8. ท่านมีความสนิทสนมและคุ้นเคยกับการทำงานร่วมกับ ผู้บริหารในสถานศึกษาอาชีวศึกษา					
9. ท่านรู้สึกว่าการทำงานในแต่ละครั้งท่านได้รับแรงกดดัน และถูกบังคับให้ทำงานให้เป็นไปตามทิศทางของผู้บริหาร หรือหัวหน้าฝ่ายมากกว่าการได้ริเริ่มทำอะไรด้วยตนเอง					
ความเชื่อใจ (trust)					
1. ท่านคาดหวังว่าผู้บริหารหรือหัวหน้าฝ่ายจะทำงานร่วมกับ ท่านไปในทิศทางเดียวกันและสามารถคาดเดาได้ว่าผลลัพธ์ ในการทำงานร่วมกันต้องสำเร็จอย่างที่ตั้งใจ					
2. ท่านเชื่อว่าผู้บริหารและหัวหน้าฝ่ายของท่านมีแรงจูงใจ และความตั้งใจที่ดีในการปฏิบัติร่วมกับทุกคนในทีม					

ปัจจัยในตัวแบบความสัมพันธ์ภาวะผู้นำทางการศึกษา	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง 5	เห็นด้วย 4	ปานกลาง 3	ไม่เห็นด้วย 2	ไม่เห็นด้วยอย่างยิ่ง 1
3. ท่านไม่คิดว่าผู้บริหารหรือหัวหน้าฝ่ายปฏิบัติกับท่านค่อนข้างลำเอียงกับผู้อื่นที่ทำงานร่วมกัน					
4. ท่านรู้สึกว่าผู้บริหารหรือหัวหน้าฝ่ายเป็นคนเปิดเผยและเป็นคนทำงานจริง					
ความพึงพอใจในงาน (job satisfaction)					
1. ท่านรู้สึกรักในงานที่ท่านทำอยู่ในปัจจุบัน					
2. ท่านรู้สึกว่างานที่ทำเป็นงานประจำที่เหมือนเดิมทุกวัน					
3. ท่านรู้สึกพึงพอใจในงานที่ท่านทำ					
4. ท่านคิดว่างานที่ทำเป็นงานที่ดีงานหนึ่ง					
5. ท่านคิดว่างานที่ทำเป็นงานที่สร้างสรรค์					
6. ท่านรู้สึกว่างานที่ท่านทำมีความน่าเคารพ					
7. ท่านรู้สึกว่างานที่ท่านทำเป็นที่นิยมในตลาดแรงงานในขณะนี้					
8. ท่านรู้สึกเพลิดเพลินตลอดเวลากับงานที่ท่านทำปัจจุบัน					
9. ท่านคิดว่างานที่ท่านทำมีประโยชน์ต่อตนเองและผู้อื่น					
10. ท่านรู้สึกว่างานที่ทำอยู่สามารถทำให้ท่านเจริญรุ่งเรืองได้					
11. ท่านรู้สึกว่างานมีความท้าทายสำหรับท่าน					
12. ท่านรู้สึกว่างานที่ท่านทำต้องใช้ไหวพริบในการจัดการ					
13. ท่านรู้สึกว่างานที่ทำนั้นง่ายไม่มีอะไรซับซ้อน					
14. ท่านรู้สึกว่างานที่ทำน่าจะนำพาท่านไปสู่ความสำเร็จในชีวิต					
ความผูกพันในสถานศึกษา (commitment)					
1. ท่านยินดีที่จะอุทิศตนในการทำงานที่สถานศึกษาแห่งนี้มากกว่าทำงานส่วนตนเพื่อให้สถานศึกษาแห่งนี้มีความสมบูรณ์แบบ					
2. ท่านมักจะคุยกับเพื่อนว่าสถานศึกษาแห่งนี้เหมาะสมอย่าง					

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ยิ่งต่อการทำงานในสายอาชีพครู					
3. ท่านรู้สึกมีความจงรักภักดีในระดับที่พอประมาณต่อสถานศึกษาที่ดำเนินงานด้วยระบบทวิภาคีแห่งนี้					
4. ท่านไม่เกี่ยงงานที่ได้รับมอบหมายและพร้อมทำงานให้สำเร็จตามที่สถานศึกษากำหนดไว้ เช่น การจัดทำหลักสูตรทวิภาคี ภาระงานนอกเหนืองานสอน งานล่วงเวลา หรือการเข้าเวรให้กับสถานศึกษา เป็นต้น					
5. ท่านรับรู้ได้ว่าค่านิยมของท่านและสถานศึกษาไม่แตกต่างกัน เสมือนมีเป้าหมายในการทำงานแบบเดียวกัน					
6. ท่านยินดีที่จะบอกผู้อื่นเสมอว่าท่านเป็นส่วนหนึ่งที่มีบทบาทสำคัญต่อสถานศึกษาอาชีวศึกษาแห่งนี้					
7. ท่านคิดว่าสามารถทำงานได้สำเร็จโดยไม่จำกัดว่าต้องทำงานกับสถานศึกษาแห่งนี้ ตราบเท่าที่ประเภทของงานเป็นแบบเดียวกัน					
8. ท่านรู้ว่าการเปลี่ยนแปลงบทบาทการทำงานมีโอกาสน้อยมากที่ทำให้ท่านต้องการลาออกจากสถานศึกษา					
9. ท่านปลาบปลื้มและภูมิใจอย่างมากที่ท่านได้มาทำงาน ณ สถานศึกษาแห่งนี้ มากกว่าการทำงานแห่งอื่น					
10. ท่านรู้สึกว่าไม่ค่อยมีเงื่อนไขใดที่ผูกมัดท่านให้เกิดการทำงานที่สถานศึกษาแห่งนี้นานขึ้น					
11. ท่านเห็นด้วยกับนโยบายที่ให้ความสำคัญต่อบุคลากรในสถานศึกษาแห่งนี้ เช่น นโยบายค่าตอบแทน นโยบายการพัฒนาทรัพยากรมนุษย์ หรือ นโยบายอัตรากำลังคน เป็นต้น					
12. ท่านใส่ใจต่อความศรัทธาที่มีให้สถานศึกษาแห่งนี้ เช่น ท่านเชื่อว่าวิสัยทัศน์ของสถานศึกษาแห่งนี้จะนำพาบุคลากรและผู้เรียนไปสู่ความสำเร็จ หรือ ผลสำเร็จของสถานศึกษาก็					

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คือผลสำเร็จของบุคลากรทุกคน					
13. ท่านรู้สึกว่าท่านได้รับโอกาสที่ดีที่สุดในชีวิตที่ทำงานเพื่อสถานศึกษาแห่งนี้					
14. ท่านคิดว่าการที่ท่านเลือกทำงานที่สถานศึกษาอาชีวศึกษาแห่งนี้คือความผิดพลาดที่ท่านต้องการแก้ไข					
ความจงรักภักดีต่อผู้นำ (leader loyalty)					
1. ท่านคิดว่าผลสัมฤทธิ์ทางการศึกษาที่ท่านทำร่วมกับผู้บริหารเป็นความสำเร็จจากความร่วมมือของทั้งสองฝ่ายภายใต้ระบบทวิภาคี					
2. ท่านชื่นชมความสำเร็จของสถานศึกษาในการจัดการหลักสูตรทวิภาคีให้มิตรสหายฟังว่ามาจากฝีมือของผู้บริหารด้วยความภาคภูมิใจ					
3. ท่านรู้สึกได้รับคำชมเชยเมื่อคนภายนอกชมผู้บริหารหรือหัวหน้างานท่าน					
4. ท่านรู้สึกว่าค่านิยมร่วมระหว่างท่านกับผู้บริหาร เกิดตั้งแต่เมื่อท่านเริ่มทำงานที่สถานศึกษาแห่งนี้					
5. ท่านเคารพในผู้บริหารเพราะมั่นคงในอุดมการณ์					
6. ท่านได้รับอำนาจในการทำงานในหลักสูตรทวิภาคี โดยที่ผู้บริหารหรือหัวหน้างานของท่านไม่ต้องคอยกังวล					
7. ท่านรู้ว่าท่านทำงานได้อย่างดีเยี่ยมและมีประสิทธิภาพตามการทำงานที่ควรทำตามบทบาทของผู้ใต้บังคับบัญชา					
8. ท่านยินดีที่จะใช้ความพยายามทุกอย่างเพื่อให้งานที่ได้รับมอบหมายจากผู้บริหารหรือหัวหน้านั้นสำเร็จลุล่วงไปด้วยดี					
ความจงรักภักดีต่อองค์การ (organizational loyalty)					
1. เมื่อท่านนึกถึงการทำงานด้านวิชาการหรือการสอนที่เกี่ยวกับทวิภาคี ท่านจะนึกถึงสถานศึกษาแห่งนี้เป็นแห่งแรก					

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ที่ท่านอยากมาทำงาน					
2. ท่านชื่นชมสถานศึกษาของท่านให้บุคคลทั้งภายในและ ภายนอกฟังอยู่เสมอ					
3. ท่านยินดีที่จะแนะนำสถานศึกษาที่ท่านทำงานอยู่ให้ผู้ที่ ท่านเห็นความสามารถมาร่วมงานในสถานศึกษาแห่งเดียวกัน					
4. ท่านส่งเสริมให้ผู้เรียนหรือบุคคลที่สนใจมาศึกษาต่อที่ สถานศึกษาที่ท่านทำงานอยู่					

ข้อเสนอแนะ

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ขอขอบพระคุณท่านที่ให้ความร่วมมือในการตอบแบบสอบถาม

BIOGRAPHY

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