THE EFFECTS OF ETHICAL LEADERSHIP AND THE TWO FORMS OF INTERACTIONAL JUSTICE ON EMPLOYEE WORK ATTITUDE OUTCOMES

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ABSTRACT

Title of Dissertation	The Effects of Ethical Leadership and the Two Forms of Interactional Justice on Employee Work Attitude Outcomes
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The purposes of this study are: (a) to examine the direct effects of ethical leadership on employee work attitude outcomes, including affective organizational commitment, affective commitment to the supervisor and job satisfaction; and (b) to explore the mediating roles of two types of interactional justice—interpersonal justice and informational justice —on the effects of ethical leadership and employee work attitude outcomes. Data were collected from 862 participants and structural equation modelling (SEM) was employed for data analysis. The research findings indicate that ethical leadership had strong direct effects on all study employee work attitudes. Moreover, the effects of ethical leadership on affective commitment to the supervisor and job satisfaction were partially mediated by informational justice, whereas interpersonal justice had no mediating roles on those effects. These research findings demonstrate the importance of ethical leadership and informational justice in benefiting employees, leaders, and organizations.

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ABBREVIATIONS

Abbreviations	Equivalence
AGFI	Absolute Goodness-of-fit Index
AIC	Akaike Information Criterion
ASEAN	Association of Southeast Asian Nations
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
EFA	Exploratory Factor Analysis
ELS	Ethical Leadership Scale
GFI	Goodness-of-fit Index
HR	Human Resources
KMO	Kaiser-Meyer-Olkin
MBA	Master of Business Administration
NIDA	National Institute of Development Administration
RMSEA	Root Mean Square Error of Approximation
SEM	Structural Equation Modeling
SR	Structural Regression
SRMR	Standardized Root Mean Square Residual

CHAPTER 1

INTRODUCTION

Leaders play important roles in influencing their employees' attitudes and behaviors in order to reach the organization's goals (Mendonca, 2001). Moreover, leaders' ethical behavior is crucial for establishing an ethical organization. Ethical leaders are viewed as providing effective leadership (Aronson, 2001; Resick, Hanges, Dickson, & Mitchelson, 2006). Previous studies have demonstrated the influence of ethical leadership on employee work behavior, including organizational citizenship behavior (DeConinck, 2015; Mayer, Kuenzi, Greenbaum, Bardes, & Salvador, 2009; Ogunfowora, 2014) and employee work attitudes, such as affective organizational commitment, job satisfaction, work engagement, and trust (Demirtas & Akdogan, 2015; Engelbrecht, Heine, & Mahembe, 2014; Neubert, Carlson, Kacmar, Roberts, & Chonko, 2009).

Employee work attitudes are important and have the potential to influence organizations' efficiency and effectiveness (Meyer & Herscovitch, 2001). Several meta-analysis studies have demonstrated that both organizational commitment and job satisfaction are linked to desired organizational outcomes, such as organizational citizenship behavior and turnover reduction (Cetin, Gurbuz, & Sert, 2015; Fassina, Jones, & Uggerslev, 2008; Kinicki, McKee-Ryan, Schriesheim, & Carson, 2002; Riketta, 2002). In addition, existing studies have emphasized the factorial distinction and effects of organizational commitment and commitment to the supervisor (Becker, 1992; Becker, Billings, Eveleth, & Gilbert, 1996). Organizational commitment has a direct effect on organizational-related outcomes, such as reducing the intention to resign, while commitment to the supervisor has a direct effect on supervisor-related tasks, such as job performance (Vandenberghe, Bentein, & Stinglhamber, 2004).

Alongside the importance of ethical leadership, interactional justice is important because it links employees' attitudes and behaviors directly to their leader (Cohen-

Charash & Spector, 2001). Interactional justice has effects on behavior, performance and employee attitude outcomes, including job satisfaction and organizational commitment (Masterson, Lewis, Goldman, & Taylor, 2000). There are two forms of interactional justice: informational justice and interpersonal justice. These forms of justice have factorial distinctions and these forms influence different organizational outcomes (Colquitt, 2001; Colquitt, Conlon, Wesson, Porter, & Ng, 2001).

1.1 Problem Statement

Ethical leadership is a crucial condition for establishing an ethical organization and stimulating ethical behavior. In addition, ethical leadership is viewed as effective leadership (Aronson, 2001). Ethical leadership influences employee work attitudes, including affective organizational commitment, affective commitment to the supervisor, and job satisfaction (Hansen, Alge, Brown, Jackson, & Dunford, 2013; Neubert et al., 2009). Previous empirical studies have indicated that these three employee work attitudes link to different processes to achieve desired organizational outcomes, such as turnover reduction and performance improvement (Tett & Meyer, 1993; Vandenberghe et al., 2004).

The mainstream research on ethical leadership and employee outcomes has been widely established in Western countries (Neubert et al., 2009; Ruiz, Ruiz, & Martínez, 2011). While Brown and Trevino (2006) argued that the construct of ethical leadership seems to be universal, aspects of ethical leadership may vary in different cultures, particularly regarding the transactional elements of ethical leadership that focus on how leaders enhance ethics in their organization. A recent meta-analysis found that the degree of correlation between ethical leadership and employee outcomes was different when comparing studies conducted in North America and Europe. In addition, ethical leadership showed stronger correlations with employee outcomes (including affective commitment and job satisfaction) for employees working in public sectors than in private sectors (Bedi, Alpaslan, & Green, 2016). Although some ethical studies have been conducted in Association of Southeast Asian Nations (ASEAN) countries (Ofori, 2009; Tahernejad, Ghorban, Ariffin, & Babaei, 2015), there has been limited ethical

leadership research conducted in Thailand, particularly in the private sector. Therefore, this specific sector and cultural context—the business organizations in private sector in the Thai context—might affect the research results, including the element of ethical leadership.

Interactional justice is important and links to desired organizational outcomes (Masterson et al., 2000). Although empirical studies have indicated the different constructs and effects of the two types of interactional justice (Colquitt, 2001), several studies have combined the two types of interactional justice into one measurement (Carter, Mossholder, Feild, & Armenakis, 2014; Gumusluoglu, Karakitapoğlu-Aygün, & Hirst, 2013; Wu, Huang, Li, & Liu, 2012). Therefore, it remains unclear which effects of interactional justice derive from informational justice (which encompasses the perception of detail and complete information) or derive from interpersonal justice (which encompasses the perception of dignity and respect from one's leader). In addition, there are limited studies on interactional justice (Li & Cropanzano, 2009), and there remains a knowledge gap regarding the mediating roles of the two types of interactional justice on the effects of ethical leadership and employee work attitudes. Therefore, a study using separate measures of interactional justice and exploring the mediating roles of interactional justice could contribute to the interactional justice knowledge.

1.2 Objectives of the Study

This research comprised two main objectives. First, this study was designed to investigate the effects of ethical leadership on employee work attitudes—including affective organizational commitment, affective commitment to the supervisor, and job satisfaction—in business organizations in the private sector in Thailand. Second, this research aimed to contribute to the interactional justice knowledge by exploring the effects of the two types of interactional justice in mediating the relationship between ethical leadership and employee work attitudes.

1.3 Research Questions

This research focused on the relationships between ethical leadership and employee attitudes outcomes, including affective organizational commitment, affective commitment to the supervisor, and job satisfaction. The research also explored the mediating roles of interactional justice—in terms of both informational and interpersonal justice—in the relationship between ethical leadership and employee work attitudes. The following questions were identified in order to accomplish the study objectives:

1) Does ethical leadership affect the employee work attitudes of affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

2) Does the perception of interactional justice—including interpersonal justice and informational justice—partially mediate the effects of ethical leadership and employee work attitudes regarding affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

1.4 Scope of the Study

This study aimed to investigate the effect of ethical leadership on employee work attitudes, and explore the mediator roles of interactional justice on the relationship between ethical leadership and employee attitudes. The scope of the study was limited to three categories in the business sector in Thailand. The first category was ethical leadership. The second category was interactional justice, which was divided into informational and interpersonal justice. The third category was employee work attitudes, which encompassed organizational commitment and job satisfaction. Organizational commitment is considered multidimensional; thus, this study focused on both affective organizational commitment and affective commitment to the supervisor. The research framework is presented in Figure 1.

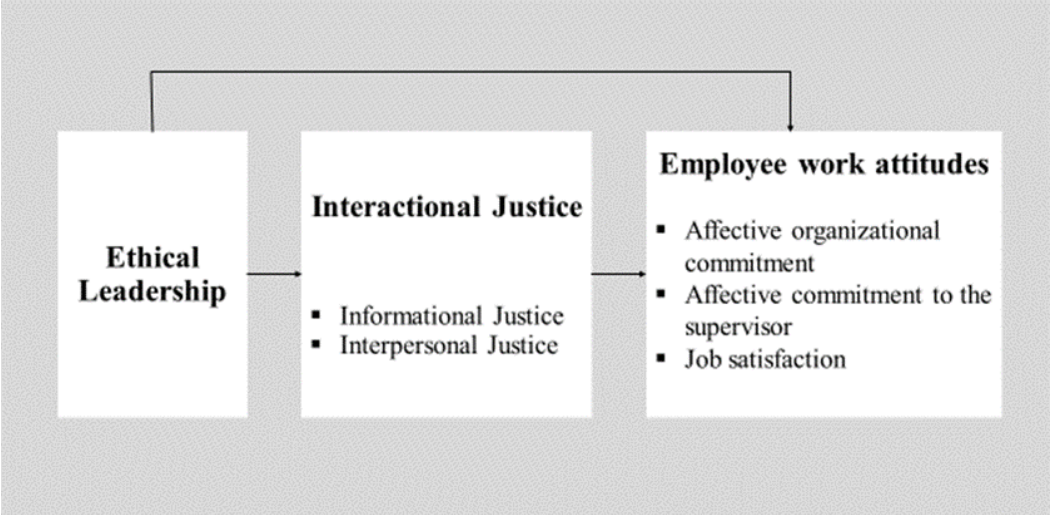

Figure 1.1 Research Framework

1.5 Research Methods

In order to investigate the effects of ethical leadership on employee work attitudes (affective organizational commitment, affective commitment to the supervisor, and job satisfaction) and explore the mediating roles of the two types of interactional justice (informational and interpersonal justice) in the relationship between ethical leadership and employee work attitudes, this study employed a quantitative research methodology by collecting research questionnaires from full-time employees attaining a Master of Business Administration (MBA) at the top four universities in Thailand. A pilot study was performed to develop, test, and validate the measurements in the Thai language. The questionnaire consisted of 38 items of five-point Likert scales to measure all variables in this study, alongside items regarding demographic information. Structural equation modeling was selected for data analysis.

1.6 Significance of the Study

Refer to the study objectives, the study will be significant for theory building and human resources (HR) practices. For theory building, the findings of this study will broaden the concept of ethical leadership theory by providing a contextual

investigation. Further, the study would contribute to interactional justice knowledge, as there are currently limited studies exploring the two types of interactional justice for mediating the effects of the relationship between ethical leadership and employee outcomes.

In regard to HR practices, the findings would provide some signals to organizations to pay more attention to their organizational leaders. Moreover, HR practitioners could integrate ethical leadership and interactional justice in their HR processes, including recruitment and selection, training and development, and promotion.

1.7 Chapter Summary

Previous studies have indicated that ethical leadership leads to effective leaders, as ethical leaders influence employees' positive attitudes toward organizations (affective organizational commitment), the leaders themselves (affective commitment to the supervisor), and employee job satisfaction. This study aimed to validate the effects of ethical leadership on employee work attitudes in the business sector in Thailand. This study also explored the two types of interactional justice as mediating the relationship between ethical leadership and employee work attitudes.

This study begins in Chapter 2 with a review of the current and relevant literature on ethical leadership, interactional justice and employee work attitudes, including organizational commitment, job satisfaction. In addition, the study reviews the relationship of ethical leadership and employee work attitudes, ethical leadership and interactional justice, and interactional justice and employee work attitudes. The objective of the literature review is to describe all the study variables and the rationale used to formulate the hypotheses.

Meanwhile, Chapter 3 examines the research methodology of this study. This chapter explains the study conceptual framework and hypotheses, measurement tools, pilot test, sample, and data analysis. Chapter 4 presents the research findings related to each of the study hypotheses. Finally, Chapter 5 integrates the results from this study

to provide a summary and discussion, including the study limitations and recommendations for future research and practice.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter presents a review of the related literature to cover all the study variables regarding ethical leadership and employee work attitudes, including job satisfaction and organizational commitment (encompassing affective organizational commitment and affective commitment to the supervisor). The literature review includes the definitions, measurement, antecedents, and consequences of all variables. Consequently, this chapter reviews the existing studies regarding the relationship between ethical leadership and each of the employee work attitudes. This chapter also reviews interactional justice as a potential mediator of the relationship between ethical leadership and employee work attitudes. Overall, this literature review aims to develop a research framework to answer the research questions.

2.1 Overview of Ethical Leadership

Ethical organization affects employee job satisfaction and affective organizational commitment (Koonmee, Singhapakdi, Virakul, & Lee, 2010). Leaders' ethical behavior is crucial to create the conditions to establish an ethical organization. Leaders need to present as ethical role models and generate an ethical climate. Moreover, ethical leaders not only stimulate ethical behavior, but also are viewed as providing effective leadership (Aronson, 2001). Therefore, ethical behavior is an essential part of leadership that enhances organizations' effectiveness (Brown & Trevino, 2006).

Although ethical behavior has been integrated as an element in existing leadership theories (Avolio & Gardner, 2005; Bass, 1985; Burn, 1978), none of these theories fully explain how leaders influence their followers to meet ethical standards (Brown & Trevino, 2006). Brown, Treviño, and Harrison (2005) developed an ethical

leadership definition and measurement. Thus, the following section describes ethics and the link between ethics and leadership, the definition of ethical leadership, the key similarities and differences between ethical leadership and existing key leadership theories, measuring ethical leadership, prospective research on ethical leadership, and the antecedents and consequences of ethical leadership.

2.1.1 Ethics and the Link between Ethics and Leadership

Ethics is defined as "inquiry into nature and grounds of morality where the term morality is taken to mean moral judgments, standards and rules of conduct" (Ferrell, Fraedrich, & Ferrell, 2011, p. 7). Ethics is sometimes considered synonymous with morality. The code of moral conduct is frequently referred to as "ethical codes," while business ethics refers to business morality (De George, 2014). Ethics is essentially concerned with the effects of an individual's actions on others (Zhu, May, & Avolio, 2004). Ethics has been emerged more than centuries, Aristotle, Plato, and Socrates examined ethics by providing a set of principles of human conduct and values to determine appropriate behaviors regarding what is right and wrong. However, numerous scholars have debated whether certain actions should be considered ethical or unethical (Zekos, 2004).

Ethical principles attempt to guide systematic moral judgment. This section summarizes the four classic ethical principles: the teleological approach, the deontological approach, the relative approach, and virtue ethics. First, the teleological approach states that whether an action is right or wrong depends on the consequences of that action. There are two common forms of consequentialist ethics: utilitarianism and egoism. Utilitarianism is an ethical theory concerning the consequences of the action—an action is right if the consequences of the action tend to be benefit to the great number of people. Meanwhile, egoism believes that individuals should make decisions that maximize their own self-interest (Ferrell et al., 2011). Second, the deontological approach encompasses moral philosophies that focus on the concept of good and correct actions, rather than the consequences of actions, as this approach states that outcomes are indefinite and unpredictable. Third, the relative approach is defined as ethical behavior from the experiences of individuals and groups. Basic relativism believes that many different views are needed to justify decisions as right or wrong.

Fourth, virtue ethics refer to values as part of an individual's character. Virtue ethics philosophers state that morals are not only relevant to given situations or moral rules, but also refer to good moral character (Ferrell et al., 2011).

Ethical behavior is an essential aspect of leaders that enhances organizations' effectiveness (Brown & Trevino, 2006). Ethical behavior is integrated into transformational leadership (Bass, 1985; Burn, 1978) and authentic leadership (Avolio & Gardner, 2005); however, no previous leadership theories have explained how leaders ensure their followers meet ethical standards (Brown & Trevino, 2006). Attention to ethical leadership in organizations emerged in 1986 (Trevino, 1986), when Trevino suggested a model of ethical decision making in organizations. The model consisted of individual variables and situational variables to explain and predict the ethical decision-making behaviors of individuals in organizations. However, previous research related to ethical leadership had primarily focused on individual traits, such as integrity. There was no systematic "ethical leadership" construct—the ethical component was embedded in existing leadership concepts, such as transformational leadership and charismatic leadership (Trevino, Brown, & Hartman, 2003).

Research on ethical leadership from the perspective of organization members was begun by Howell and Avolio (1992); Trevino, Hartman, and Brown (2000); and Trevino et al. (2003). Howell and Avolio (1992) identified the different key behaviors and moral standards of unethical and ethical charismatic leaders. Ethical leaders develop moral standards that influence decisions of what is right and wrong, while unethical charismatic leaders only follow moral standards if they perceive that these standards will satisfy their self-interests. Table 2.1 provides a summary of the key findings of the ethical and unethical behaviors of charismatic leadership.

Table 2.1 Unethical and Ethical Behaviors of Charismatic Leadership

Unethical Charismatic Leadership
• Using power for personal benefits • Promoting personal vision • Blaming others who have opposing views • Demanding one's own decisions be implemented • One-way communication • Unconcern for followers' needs • Reliance on external standards to serve self-interests
Ethical Charismatic Leadership
• Using power to serve others' benefits • Promoting the vision alignment with the team's needs and aspirations • Accepting feedback and learning from criticism • Energizing followers to think independently • Open, two-way communication • Coaching, developing, and supporting followers; recognizing others • Relying on internal moral standards to serve the organization and society

Source: Howell & Avolio, 1992, p. 45.

Trevino et al. (2000) conducted interviews on ethical leadership, and found that ethical leaders can be summarized into two dimensions: moral person and moral manager. The moral person dimension refers to moral traits (integrity, honesty, and trustworthiness), moral behaviors, and ethical decision making. It seems that moral people consistently conduct moral behaviors in their personal lives and are concerned with society. The moral manager dimension refers to how leaders use certain tools to promote ethical conduct in their organization. As ethical leaders, it is critical that these leaders be viewed by others as role models, provide ethical communication, and use rewards and punishment to ensure ethical conduct. Trevino et al. (2000) stated that being a strong moral person, yet a weak moral manager, creates the risk of being viewed

as a “neutral” leader. Neutral leaders are perceived to be silent on ethical issues, and their followers believe they are unconcerned about ethics.

Trevino et al. (2003) conducted qualitative research to define the content domain of executive ethical leadership. The results indicated that ethical leadership is more than traits- and values-based inspirational leadership. It includes the elements of both transformational and transactional leadership. The transactional component comprises leaders who use reward and punishment to guide ethical behavior, hold employees accountable, conduct performance appraisal, and set ethical standards. The transformational component involves being people oriented, role modeling, and focusing on ethical values.

In summary, the key ethical components include being people oriented, having ethical actions and traits, setting ethical standards and accountability, having broad ethical awareness, and upholding an ethical decision-making process. Trevino et al. (2003, p. 20) also argued that, “ethical people can be bad leaders or unethical leaders”. These previous qualitative researchers drew a clear picture of the characteristics of ethical leaders; however, they provided no systematic development of ethical leadership construct, or testing and validation of ethical leadership (Brown et al., 2005).

2.1.2 Definition of Ethical Leadership

Brown et al. (2005) developed an ethical leadership construct and definition. Ethical leadership is defined as a leader with: “The demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making” (Brown et al., 2005, p. 120). According to Brown et al.’s (2005) definition, ethical leadership can be broken into four elements.

The first element is “demonstration of normatively appropriate conduct through personal actions and interpersonal relationships” (Brown et al., 2005, p. 120). This component states that leaders who are perceived as ethical leaders should behave normatively appropriately so that they will be recognized as ethical role models, such as demonstrating honesty, trustworthiness, fairness, and care. The term “normatively appropriate” refers to situations as context dependent, such as being influenced by culture. Brown et al. (2005, p. 120) stated that, “in some cultures normatively

appropriate behavior might include speaking out publicly against some organizational action; in other cultures, such public voice would be considered to be normatively inappropriate". The second element is "promotion of such conduct to followers through two-way communication" (Brown et al., 2005, p. 120). This component suggests that ethical leaders not only behave ethically themselves, but also emphasize on ethics in public by speaking about ethics to their followers, and providing procedural guidance or interpersonal process with ethics (Brown et al., 2005; Howell & Avolio, 1992).

The third element focuses on reinforcing ethical behavior. This component implies that, for leaders to lead ethically, they must set ethical standards, reward their followers who behave ethically, and punish their followers who behave unethically or do not follow the ethical standard (Brown et al., 2005; Trevino et al., 2003). Finally, the fourth element is ethical decision making. This aspect of the definition reflects that leaders should consider the consequences of their decisions before they are implemented. The ethical decision making by leaders could be observed by others (Brown et al., 2005; Howell & Avolio, 1992).

The above definition divides ethical leadership into two dimensions—"moral person" and "moral manager"—based on the research by Trevino et al. (2000). The "moral person" dimension refers to being a role model and demonstrating ethical behavior, including ethical decision making. The "moral manager" dimension refers to the leader promoting ethical behavior via explicit communication and reinforcement of ethical conduct. Trevino et al. (2000) argued that being a strong moral person, yet weak moral manager, can risk leaders being viewed as "neutral." Neutral leaders are perceived as being silent on ethical issues, and their followers believe they are not concerned about ethics. The definition of ethical leadership also portrays elements of both transformational and transactional leadership. The transformational component includes role modelling and focusing on ethical values. The transactional component uses rewards and punishments to guide ethical behavior (Trevino et al., 2003).

According to Brown et al. (2005) and Brown and Trevino (2006), ethical leadership relies on two theories—social learning theory (Bandura, 1977) and social exchange theory (Blau, 1964)—as the theoretical framework to explain the effects of the perception of ethical leadership regarding follower work behavior and attitude outcomes. First, social learning theory suggests that individuals learn normatively

appropriate conduct through their own experiences and by observing others (Bandura, 1977). Ethical leaders are the source of employees' learning because ethical leaders are attractive and credible as role models. Ethical leaders are attractive because they demonstrate care, concern, and fairness to their followers. Ethical leaders are credible because they are trustworthy and set high ethical standards for themselves and others (Brown et al., 2005; Brown & Trevino, 2006). Second, regarding social exchange theory, Blau (1964) suggested that social exchange is the creation of personal obligation and trust. The followers of ethical leaders perceive themselves as having a social exchange relationship with these leaders because they perceive fairness and care from their leaders (Brown et al., 2005; Brown & Trevino, 2006).

2.1.3 Key Similarities and Differences between Ethical Leadership and Existing Leadership Theories

Ethical behavior is integrated as an element of the existing leadership theories of transformational leadership and authentic leadership. The key similarities and differences between ethical leadership and these leadership theories are described below.

2.1.3.1 Ethical Leadership and Transformational Leadership

Burn (1978) proposed that transformational leadership refers to moral leadership or ethical leadership, as transformational leaders inspire their followers to work for a collective purpose. However, Bass and Steidlmeier (1999) went further by distinguishing the two types of transformational leadership as "authentic transformational leadership" and "pseudo transformational leadership." Authentic transformational leaders are moral because they value ethics and idealize moral standards, while pseudo transformational leaders are not moral leaders because they idealize seeking power and position through their followers' achievements (Bass & Steidlmeier, 1999).

Questions about ethics in transformational leaders remain; however, researchers tend to advocate transformational leadership as leaders who have ethical orientation. For example, Turner, Barling, Epitropaki, Butcher, and Milner (2002) found that moral reasoning or moral judgment—one of the components of ethical leaders—is associated with transformational leaders. The study used the Defining

Issues Test to measure moral reasoning, and the Multifactor Leadership Questionnaire to measure leadership styles. Turner et al. (2002) found that moral reasoning was associated with transformational leaders, while moral reasoning was not associated with transactional leaders. Another study that supports transformational leaders as having ethical orientation is the research by Parry and Proctor-Thomson (2002). They conducted research to explore whether transformational leaders are associated with perceived integrity. Their findings showed that integrity was positively associated with transformational leaders.

Brown and Trevino (2006) summarized that transformational leaders and ethical leaders overlap in some characteristics. Leaders in both leadership styles have concern for people, act with moral principles (such as integrity), make ethical decisions based on the consequences of their decisions, and are viewed as role models of ethical behavior. Ethical leadership has been proven to correlate with the idealized influence dimension of transformational leadership (Brown et al., 2005). However, ethical leadership had predicted more outcomes than the effects of the idealized influence dimension of transformational leadership (Brown et al., 2005) because ethical leaders use more transactional leadership for moral management than do transformational leaders. Therefore, Brown and Trevino (2006) highlighted the key differences between ethical leadership and transformational leadership: ethical leaders focus more on ethical standards and moral management by using reward and punishment to encourage and ensure their teams achieve ethical standards.

2.1.3.2 Ethical Leadership and Authentic Leadership

The essence of authenticity is to know, accept, and remain true to oneself. One of the definitions of authentic leadership is: “persons who have achieved high levels of authenticity in that they know who they are, what they believe and value, and they act upon those values and beliefs while transparently interacting with others” (Avolio, Gardner, Walumbwa, Luthans, & May, 2004, p. 802). The key components of authentic leadership are:

1) a positive mindset, which indicates openness and concern for others

2) a moral perspective, which includes transparent decision making and moral action

3) self-awareness and self-regulation, including recognizing one's own existence and practicing self-control

4) leadership process/behavior, including demonstrating consistency in moral decision making and action

5) follower self-awareness and regulation, including leaders understanding and raising self-awareness and regulation of followers

6) people development (Avolio & Gardner, 2005).

Brown and Trevino (2006) argued that authentic leadership seems to overlap with ethical leadership. Both leadership styles have integrity and ethical principles by considering the consequences of decision making. Authentic leaders and ethical leaders are concerned for others and are viewed as ethical role models. However, the key difference is that ethical leaders emphasize moral management by giving reward and punishment to people to ensure ethical standards, which is more transactional leadership. In contrast, authentic leaders emphasize self-awareness, which is not part of the ethical leadership construct.

Table 2.2 Key Similarities and Differences between Ethical Leadership and Other Leadership Theories

Leadership Style	Key Similarities	Key Differences
Ethical leadership vs. transformational leadership	Concern for people Act with moral principles Integrity Make decisions by considering ethics Ethical role model	Ethical leadership uses a more transactional leadership style for moral management
Ethical leadership vs. authentic leadership	Concern for people Act with moral principles Integrity Make decisions by considering ethics Ethical role model	Authentic leaders emphasize self-awareness, while ethical leadership emphasizes moral management

Source: Brown & Trevino, 2006.

2.1.4 Measuring Ethical Leadership

Brown et al. (2005) developed the ethical leadership scale (ELS) to measure the level of ethical leadership. Currently, there are other ethical leadership measurements used in ethical leadership research (Kalshoven, Den Hartog, & De Hoogh, 2011; Yukl, Mahsud, Hassan, & Prussia, 2013). Although there has been no consensus on the measurement of ethical leadership, the ELS by Brown et al. (2005) has been widely used to measure ethical leadership (Bedi et al., 2016).

Brown et al. (2005) developed ELS and conducted a series of seven studies to validate ELS. The studies included content validation and reliability, discriminant validity of the instrument, and prediction of ethical leadership and outcomes. The ELS is a unidimensional measurement with 10 items. These 10 items cover the four elements in the ethical leadership definition. One of these elements is decision making, according to the definition by Brown et al. (2005). Decision making is an important role of leaders. To minimize unethical issues in business, leaders need to make decisions in ethical ways.

Trevino, Weaver, and Reynolds (2006) stated that ethical decision making involves all stages of the decision-making process, from the beginning of an ethical or moral problem until engaging in a given behavior. The widely used on research on individual ethical decision-making model is Rest's (1986) four-component analysis: moral awareness, moral judgment, moral motivation, and moral implementation.

Moral awareness or moral issue identification is the process whereby the individual recognizes the moral standard or moral problem that exists in a given situation. Moral awareness has two approaches. One focuses on individual ethical or moral sensitivity, while the other focuses on factors that create moral awareness, such as the context. Moral judgment is the process by which the individual assesses the "ethics" or "un-ethics" of each action. The individual needs to make a judgment about a particular situation and identify each action as "right" or "wrong." Moral motivation refers to willingness to take the moral course of action, value moral values over other values, and take responsibility for the outcomes. Moral implementation is the execution—the individual must overcome the challenges to take ethical action (Rest, 1986).

The ELS items related to the ethical decision process are: “Makes fair and balanced decisions” and “When making decisions, asks what is the right thing to do.” These items are limited to cover all aspects of the decision-making process, particularly moral motivation and moral implementation. Charoensap (2015) extended the seminal works by Brown et al. (2005) by developing more items related to ethical decision making based on previous qualitative research regarding the characteristics of leaders for ethical decision making in business (Charoensap, Pungcharoenpong, & Charoonnarth, 2015) and to cover the four components of ethical decision making (Rest, 1986). Those items were added to the existing ELS by Brown et al. (2005). The new measurement was called the “extended-ELS.” Measurement testing and validation were performed, with the results demonstrating good reliability and predicting the outcomes of ethical leadership (Charoensap, 2015). This research measures ethical leadership by using the extended-ELS.

In the qualitative research by Charoensap et al. (2015), the three themes attained from the qualitative findings were as follows: 1) “Leaders lead self as ethical leader”, 2) “Leaders lead ethical decision making processes,” and 3) “Leaders lead others for ethical implementation.” The findings from qualitative research portray the processes of ethical decision making, which involve all activities related to ethical issues in business, from the starting point to the end of activities, including reinforcing and monitoring those activities to ensure they meet ethical standards (Charoensap et al., 2015). Therefore, three additional items were added to the ELS: “My supervisor is willing to do the right things and is responsible for the results,” “My supervisor participates in actions and overcome obstacles in order to meet ethical standards,” and “My supervisor appreciates and recognizes the employees that behave in an ethical manner.”

2.1.5 Prospective Research on Ethical Leadership

Brown and Trevino (2006) went one step further by raising propositions on the antecedents and consequences of ethical leadership. The antecedents included situational influences and individual characteristics, while the consequences included the effects of ethical leadership toward employee behaviors and attitudes which benefit to the organization. Examples include employee positive behavior, employee

counterproductive behavior reduction, employee ethical decision making, employee satisfaction, employee motivation, and organizational commitment. Figure 2.1 presents a summary of the proposition by Brown and Trevino (2006).

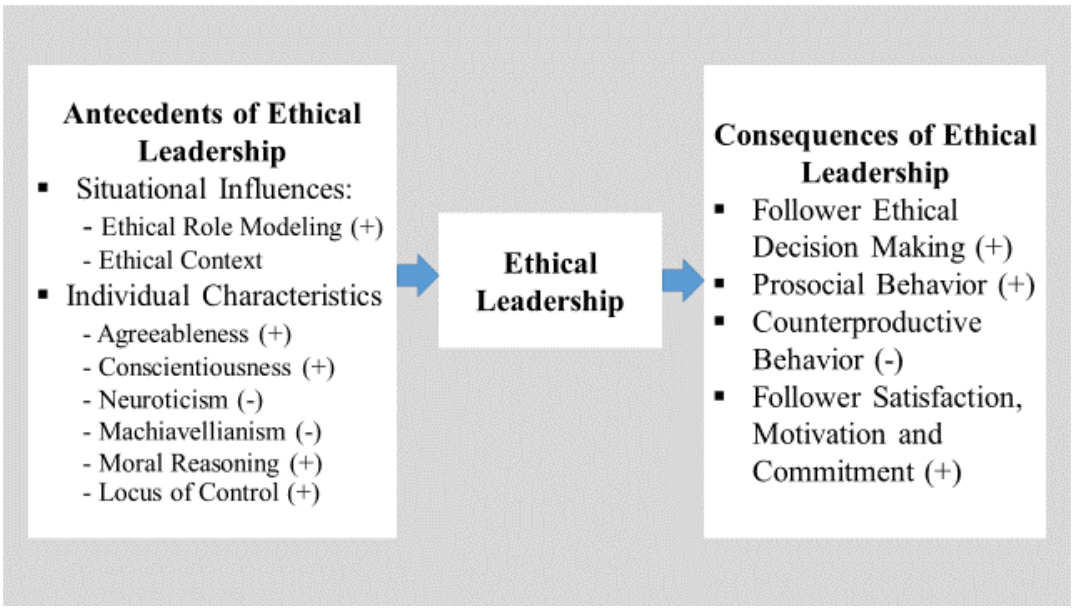

Figure 2.1 Antecedents and Consequences of Ethical Leadership

Source: Brown & Trevino, 2006.

Note: (+) is the positive relationship between the antecedents or consequences and ethical leadership; (-) is the negative relationship between the antecedents or consequences and ethical leadership.

2.1.6 Antecedents of Ethical Leadership

Brown and Trevino (2006) suggested two sources of the antecedents of ethical leadership: situational influence and individual characteristics.

2.1.6.1 Situational Influence

Brown and Trevino (2006) proposed that ethical role models and the ethical context are the most influential factors affecting employees' perceptions of ethical leadership toward their leaders. Previous qualitative studies have indicated the characteristics and behaviors of leaders who are viewed as ethical role models, including integrity, honesty, and trustworthiness (Trevino et al., 2000; Weaver,

Treviño, & Agle, 2005). There are many ways to refer to the ethical context; however, most empirical studies have employed ethical climate and ethical culture to refer to ethical context. Ethical climate is the organizational practices and procedures that are considered ethical. Organizations need to have clear rules to guide employee behavior, such as rules about conflicts of interest in the ethics code. The laws and codes need to be of a professional standard. Ethical culture is defined as the multidimensional formal and informal systems that are capable of promoting ethical behavior (Treviño, Butterfield, & McCabe, 1998).

2.1.6.2 Individual Characteristics

Brown and Trevino (2006) proposed individual characteristics as the antecedents of ethical leadership. Individual characteristics include personality, Machiavellianism, moral reasoning, and locus of control. Brown and Trevino (2006) stated that leaders' characteristics of "agreeableness" and "conscientiousness" are positively related to ethical leadership, while "neuroticism" is negatively related to ethical leadership.

2.1.7 Consequences of Ethical Leadership

Brown and Trevino (2006) argued that ethical leadership is considered important because of its potential to influence followers' outcomes. The ethical leadership definition is used by social learning theory as a theoretical framework to explain the effects of ethical leaders based on the perceptions of their followers. Followers imitate leaders' behavior because leaders are attractive and credible models of normatively appropriate behavior. Moreover, ethical leaders communicate the key point of ethical standards, and use reward and punishment to hold people accountable for ethical conduct. Previous studies on the consequences of ethical leadership can be divided into three categories, as follows.

2.1.7.1 Ethical Leadership and Employee Work Attitudes

Empirical data have indicated that ethical leadership has a positive relationship with many employee work attitudes. Examples of those employee work attitudes include employees' job satisfaction (Neubert et al., 2009; Ogunfowora, 2014; Seashore Louis, Dretzke, & Wahlstrom, 2010), satisfaction with supervisor (Brown et al., 2005), organizational commitment (Neubert et al., 2009), work engagement

(Demirtas, 2015; Seashore Louis et al., 2010), and trust in supervisor (Engelbrecht et al., 2014). Ethical leadership also enhances followers' perceptions of important job characteristics, such as job autonomy and task significance (Piccolo, Greenbaum, Hartog, & Folger, 2010).

2.1.7.2 Ethical Leadership and Employee Behavior

Substantial studies have supported the relationship between ethical leadership and employee work behaviors. Those behaviors include investing additional effort (Brown et al., 2005), a willingness to report problems (Brown et al., 2005), organizational citizenship behavior (DeConinck, 2015; Mayer et al., 2009; Ogunfowora, 2014), and reduced turnover intention (DeConinck, 2015).

2.1.7.3 Ethical Leadership and Performance

Empirical data have also demonstrated that ethical leadership is positively related to employee perceptions of supervisor effectiveness (Brown et al., 2005); perceptions of top management effectiveness (De Hoogh & Den Hartog, 2008); and the potential for promotion to senior management positions, especially when the organizations are intolerance in unethical behavior (Rubin, Dierdorff, & Brown, 2010).

2.2 Employee Work Attitudes

This study focused on employee work attitudes because attitudes can guide employee behaviors. There are several indicators reflecting employee work attitudes; however, due to the link between ethical leadership and interactional justice, in this study, employee work attitudes encompassed organizational commitment and job satisfaction.

2.2.1 Organizational Commitment

Organizational commitment is important for the study of work attitudes because it has the potential to influence the efficiency and effectiveness of organizations (Meyer & Herscovitch, 2001). This has been confirmed by a significant amount of academic research conducted in this area (Cetin et al., 2015; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002; Riketta, 2002). This section reviews the constructs and definitions

of organizational commitment, the antecedents and consequences of organizational commitment, and how these are linked to ethical leadership. This section then reviews the measurement of affective organizational commitment.

2.2.1.1 Constructs and Definitions of Organizational Commitment

Organizational commitment has various constructs and definitions, based on attitudinal and behavioral perspectives. The distinction between attitudinal and behavioral commitment is now well established (Reichers, 1985; Scholl, 1981). Attitudinal commitment relates to people's relationship with their organization, in which individuals consider how their own values and goals are aligned with the organization. In contrast, behavioral commitment relates to the process of individuals becoming attached to the organization, and how they do when they deal with the problems of their organization. Attitudinal approaches are reflected in research by identifying the antecedents and consequences related to commitment, while behavioral approaches are reflected in research by focusing on the behaviors (Meyer & Allen, 1991).

Cohen (2003) summarized that organizational commitment has been growing. Organizational commitment was divided into two approaches. These two approaches are the calculative approach and attitudinal approach. The calculative approach involves individuals responding to the perceived cost of leaving an organization, or inducement to leave if they foresee benefits. The attitudinal (or affective) approach refers to the commitment of individuals to remain members in the organization in order to continue their goals. This approach has been termed "affective commitment" (Meyer & Allen, 1991) or "value commitment" (Angle & Perry, 1981). The early concept of organizational commitment was varied and scholars debated whether it was a single or multidimensional construct (e.g., Becker, 1960; Mowday, Steers, & Porter, 1979; Wiener, 1982), yet it is now widely recognized that organizational commitment is as multidimensional construct (Meyer & Allen, 1991; Meyer & Herscovitch, 2001; Meyer et al., 2002). Table 2.3 presents a summary of the multidimensional commitment constructs.

The three components of organizational commitment developed by Allen and Meyer (1990) have been widely used in organizational commitment research over the years, as they capture the multidimensional nature of organizational commitment

(Meyer et al., 2002). The three components of organizational commitment consist of affective commitment, continuance commitment, and normative commitment. The key theme of the three components of organizational commitment is a psychological state that represents the relationship between employees and the organization, and the decision to continue or discontinue working in that organization.

Affective commitment refers to: “the employee’s emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so” (Meyer & Allen, 1991, p. 67). Continuance commitment refers to employees’ commitment to remain in the organization because they are concerned about the cost of leaving. Normative commitment refers to feeling a duty or obligation to continue working in an organization (Meyer & Allen, 1991).

Table 2.3 Multidimensional Model of Organizational Commitment

Model Constructs	Definitions	Advocates
Value Commitment	"Commitment to support the goals of the organization"	Angle and Perry (1981, p. 4)
Commitment to stay	"Commitment to retain their organizational membership"	
Moral	"Acceptance of and identification with organizational goals"	Penley and Gould (1988, p. 46, 48)
Calculative	"A commitment to an organization which is based on the employee's receiving inducements to match contributions"	
Alienative	"Organizational attachment which results when an employee no longer perceives that there are rewards commensurate with investments; yet he or she remains due to environmental pressures"	
Affective	"The employee's emotional attachment to, identify with, and involvement in the organization"	Meyer and Allen (1991, p. 67)
Continuance	"An awareness of the costs associated with leaving the organization"	
Normative	"A feeling of obligation to continue employment"	
Passive Commitment	"The desire to remain an employee of the organization. This passive commitment is usually referred to as loyalty, and recently has been conceptualized by Allen and Meyer (1990) as continuance commitment"	Bar-Hayim and Berman (1992, p. 381)
Active Commitment	"Identification and involvement with the organization"	
Continuance	"The degree to which an individual experiences a sense of being locked in place because of the high costs of leaving"	Jaros, Jermier, Koehler, and Sincich (1993, p. 953–955)
Affective	"The degree to which an individual is psychologically attached to an employing organization through feelings such as loyalty, affection, warmth, belongingness, fondness, pleasure, and so on"	
Moral	"The degree to which an individual is psychologically attached to an employing organization through internalization of its goals, values, and missions"	

Source: Meyer & Herscovitch, 2001, p. 304.

2.2.1.2 Consequences and Antecedents of Organizational Commitment

Meyer et al. (2002) conducted a meta-analysis of 155 studies involving 50,146 employees to assess relations among the three components of organizational commitment. Moreover, this study analyzed the relations between those components and the variables identified as the antecedents and consequences of organizational commitment. The results indicated that organizational commitment had a relationship with key employee outcomes, including turnover, withdrawal cognition, absenteeism, organizational citizenship behavior, and job performance. The three types of commitment had a negative correlation with turnover and withdrawal cognition. Interestingly, affective commitment had the strongest negative correlation with turnover and withdrawal cognition, while affective commitment had the strongest positive correlation with job performance and organizational citizenship behavior. Moreover, only affective commitment had a negative correlation with absenteeism, stress, and work–family conflict.

The predicted antecedents of organizational commitment from the meta-analysis by Meyer et al. (2002) were divided into four group: 1) employees' demographic features, 2) individual differences in personality, 3) work experience and supervisor, and 4) availability of alternative approach. The results demonstrated that age and organizational tenure correlated weakly with all three components of organizational commitment. The external locus of control correlated negatively with affective commitment. According to the factors related to work experience and supervisor, the study found that organizational support, transformational leadership, and the three types of justice (distributive, procedural, and interactional justice) had a positive correlation with affective commitment and normative commitment (Meyer et al., 2002). Figure 2.2 presents a summary of the antecedents and consequences of affective organizational commitment.

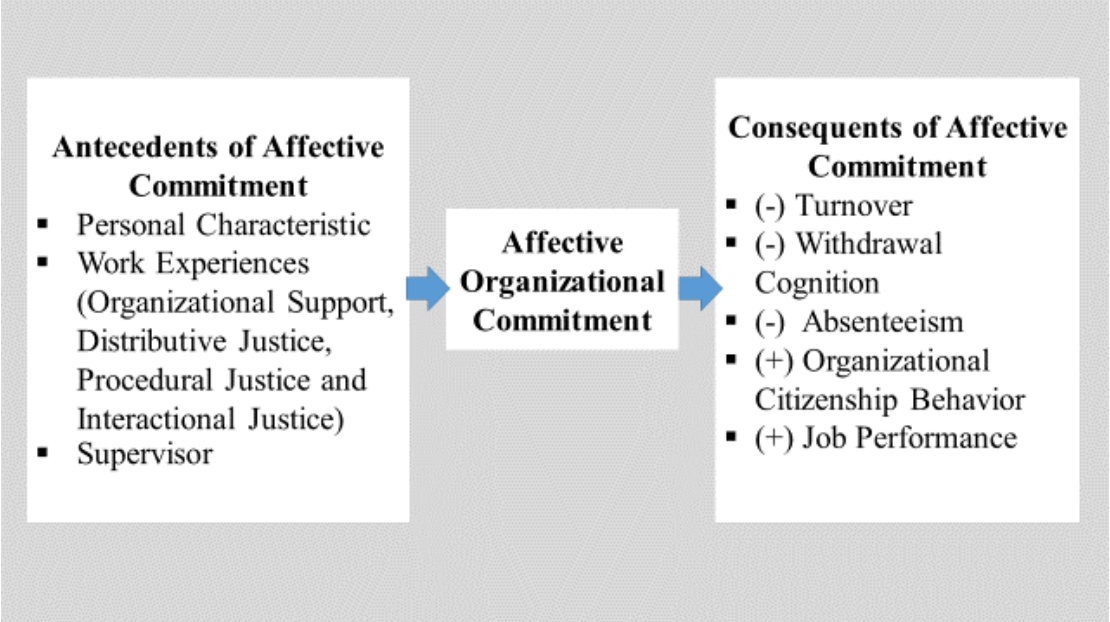

Figure 2.2 Antecedents and Consequences of Affective Commitment

Source: Meyer et al., 2002.

Note: (+) is the positive relationship between the antecedents or consequences and affective organizational commitment; (-) is the negative relationship between the antecedents or consequences and affective organizational commitment.

2.2.1.3 Measurement and Two Foci of Affective Commitment

Affective organizational commitment refers to employees' emotional attachment to the organization (Meyer & Allen, 1991). Emotional attachment is the most manageable employee attitude, as it links to leaders and affects employees' commitment to the desired organizational outcomes (Meyer & Allen, 1988). Moreover, compared to normative and continuance commitment, affective organizational commitment has the strongest relation to the most desired organizational outcomes, such as organizational citizenship behavior, job performance, turnover, and absenteeism reduction (Meyer et al., 2002). Currently, affective commitment is still considered the dominant typology of organizational commitment (Klein, Molloy, & Cooper, 2009).

Allen and Meyer (1990) developed eight items to measure each component of organizational commitment, including affective organizational

commitment. This measurement had four reversed questions. Later, the measurement was revised into six items by Meyer, Allen, and Smith (1993). The deleted items were: "I enjoy discussing my organization with people outside it" and "I think that I could easily become as attached to another organization as I am to this one," which was a reversed question. Meyer et al. (2002) found that the eight- and six-item measures of affective commitment were not significantly different in their results.

Existing studies have emphasized the distinction between the construct of organizational commitment and commitment to the supervisor (Becker, 1992; Becker et al., 1996). The effects of the two foci of affective commitment are also different. Organizational commitment has a direct effect on organizational-related outcomes, such as reducing the intention to quit, while commitment to the supervisor has a direct effect on supervisor-related tasks, such as job performance (Vandenberghe et al., 2004).

2.2.2 Job Satisfaction

In the early 1930s, job satisfaction was not widely used for studies in applied psychology and management. However, an increase in job satisfaction studies was noticed from the early 1950s. More than 10,000 published studies used job satisfaction as one of the variables. Individuals who are satisfied with their job can potentially predict job efficiency (Wright, 2006). This section reviews the constructs and definitions of job satisfaction, measures of job satisfaction, and antecedents and the consequences of job satisfaction.

2.2.2.1 Constructs and Definitions of Job Satisfaction

Job satisfaction has been viewed from various perspectives. Locke (1976, p. 1304) defined job satisfaction as an attitude toward one's job: "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". Some scholars define job satisfaction as the characteristics of the job itself and the work environment: "Job satisfaction construct as all characteristics of job itself and the work environment which industrial salesmen find rewarding, fulfilling, and satisfying, or frustrating and unsatisfying" (Churchill, Ford, & Walker, 1974, p. 255). Some scholars view job satisfaction as a bi-dimensional construct encompassing intrinsic job satisfaction and extrinsic job satisfaction (Warr, Cook, & Wall, 1979), or view job

satisfaction as satisfaction/dissatisfaction (Winefield, Tiggeman, & Goldney, 1988). In general, job satisfaction is viewed as singular (Spector, 1985) or multidimensional (Brayfield & Rothe, 1951).

Gruneberg (1979) summarized several popular theories that explain employee job satisfaction, including Herzberg et al. (1959) two-factor theory, which includes two groups involved in job satisfaction. The first group encompasses motivators, including personal achievement, recognition, and growth; the intrinsic interest of the work itself; and other motivations correlated to self-autonomy and self-actualization. These motivators lead to satisfaction. The second group encompasses hygiene factors, such as pay, security, relationship with supervisor, relationship with coworkers, and physical work conditions. These hygiene factors lead to job dissatisfaction when individuals perceive they are not adequately attained. Another theory is the needs/value fulfilment theory (Vroom, 1964), which states that individuals value different factors in their job, which is likely to affect their level of job satisfaction. Therefore, a number of theorists have stated that the degree to which individuals fulfil their needs relates to the degree to which they are satisfied their jobs (Gruneberg, 1979).

2.2.2.2 Definitions and Measurement of Job Satisfaction

There is no agreement on the operational definition of job satisfaction; thus, each operational definition has resulted in different measurements. Job satisfaction is viewed either a singular construct or multidimensional construct. The singular construct consists of general scales of job satisfaction and is used to estimate the general overall feeling about one's job. General scales of job satisfaction are also called global scales. The scales combine questions to reflect reactions to various aspects of the job in a single integrated response (Ironson, Smith, Brannick, Gibson, & Paul, 1989). General scales of job satisfaction are most likely to fall into two types: single item and multi-item (Faragher, Cass, & Cooper, 2005). Oshagbemi (1999) found that the multi-item job satisfaction scales were more close to reality than were the single item scales. The multi-item job satisfaction scales that are commonly used in research are the Occupational Stress Indicator (Evers, Frese, & Cooper, 2000) and Brayfield and Rothe Questionnaire (Brayfield & Rothe, 1951). The multidimensional construct of job satisfaction consists of specific facet scales. It is used to cover separate areas of job

satisfaction in order to diagnose strengths and weaknesses in various units of an organization (Spector, 1985).

Ironson et al. (1989) concluded that the main purpose of general or global scales of job satisfaction is to ask respondents to combine their feelings or attitudes toward the job in a single integrated response. However, some studies have adapted facet scales into general scales by using composite scales. Composite scales combine the questions from each area of job satisfaction, and assume that the whole is equal to the sum of its principle parts. For example, previous researchers have summed the scores on five subscales of the Job Description Index scales into one measurement to measure job satisfaction, even though the purpose of the Job Description Index scales is not to measure a singular construct. Ironson et al. (1989) argued that composite scales may be insufficient to estimate general satisfaction for the following reasons:

1) facet scales might not cover some areas that are important to the individual, thus, composite scales might be insufficient to estimate general job satisfaction

2) facet scales might include some areas that are not relatively important to measure general job satisfaction

3) facet scales might not reflect the general characteristics of the individual

4) the frame of reference to answer facet scales might be different from global scales

5) adding or combining facet scales in a single form may not capture the unique characteristics of general or global scales.

Therefore, researchers should select general scales to measure overall job satisfaction or use a multidimensional construct to measure each area of job satisfaction.

2.2.2.3 Consequences and Antecedents of Job Satisfaction

Job satisfaction has the potential to predict positive organizational outcomes. For example, a meta-analysis study containing 45 studies with 13,923 samples found that job satisfaction was a predictor of all dimensions of organizational citizenship behavior: altruism, conscientiousness, courtesy, civic virtue, and sportsmanship (Fassina et al., 2008). Another meta-analysis study by Kinicki et al. (2002) containing 152 studies found that job satisfaction was positively related to

motivation, citizenship behaviors, and job performance, and negatively related to withdrawal cognitions and withdrawal behaviors. Kinicki et al. (2002) also examined the antecedents of job satisfaction and found that job satisfaction had a positive relation with job characteristics, group and organizational characteristics, and leader relationships. Job satisfaction also had a negative relation with role states, including role conflict and role ambiguity. Figure 2.3 summarizes the antecedents and consequences of job satisfaction proposed by Kinicki et al. (2002).

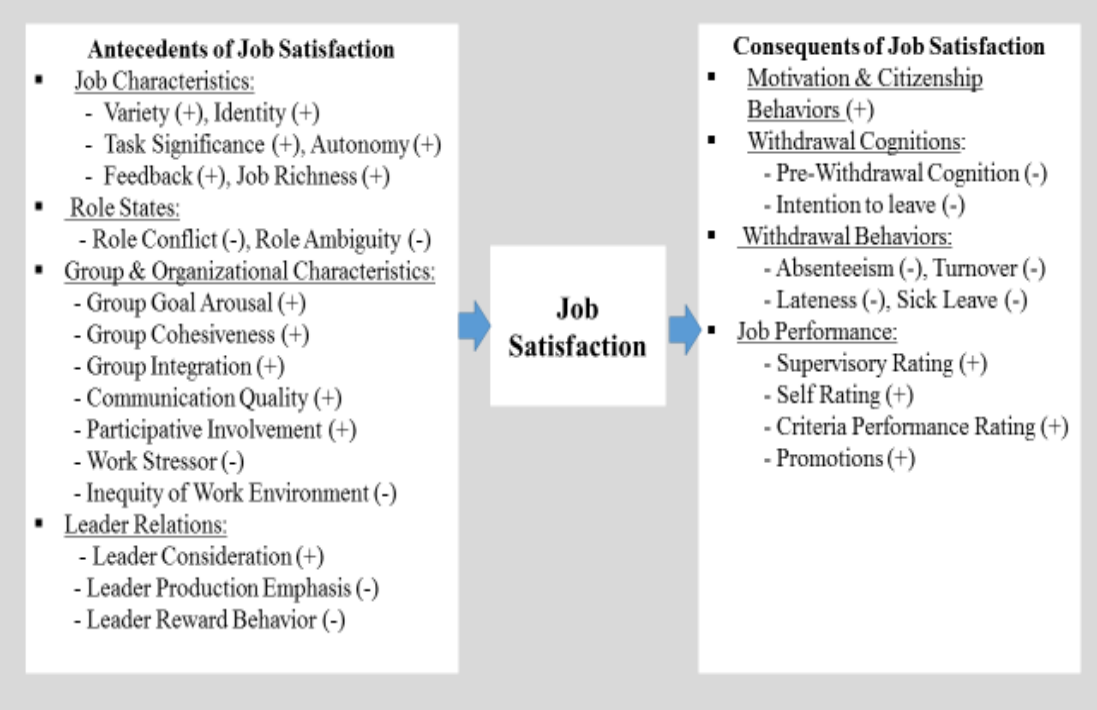

Figure 2.3 Antecedents and Consequences of Job Satisfaction

Source: Kinicki et al., 2002.

Note: (+) is the positive relationship between the antecedents or consequences of job satisfaction; (-) is the positive relationship between the antecedents or consequences and job satisfaction.

Brown and Peterson (1993) conducted a meta-analysis study of job satisfaction, and found that more than 30 constructs have been investigated empirically as the antecedents of job satisfaction. They summarized four categories of the

antecedents of job satisfaction as follows: 1) work outcomes, 2) individual differences, 3) role perceptions, and 4) two types of organizational variables—job characteristics and supervisor behavior. Churchill et al. (1974) found that closeness with one's supervisor and the perception of one's supervisor's standards in controlling and evaluating employee job performance were positively related to employee satisfaction. Congruent with the meta-analysis by Brown and Peterson (1993), the research results demonstrated that supervisor behaviors had a positive relationship with job satisfaction. These behaviors included closeness of the supervisor, leader consideration, job feedback, and reinforcement.

It has been debated whether job satisfaction is a global concept or is composed of satisfaction with various aspects of an individual's job (Oshagbemi, 1999). Sousa-Poza and Sousa-Poza (2000) conducted a cross-national analysis on job satisfaction, and found that having an interesting job and good supervisor were the predictors of job satisfaction that applied to all countries.

2.3 Interactional Justice

Studies of justice in organizations have been growing over several decades (Cropanzano, Rupp, Mohler, & Schminke, 2001). The meta-analytic results have confirmed that different justice perceptions lead to different important organizational outcomes, such as organizational commitment, job satisfaction, organizational citizenship behavior, and job performance (Colquitt et al., 2001). In addition, a number of studies have suggested that policies and procedures mostly derive from the organization; thus, the perception of procedural justice is linked to attitudes and behaviors toward the organization. In contrast, perceptions of the fairness of interactions are seen as linked directly to the supervisor; thus, interactional justice is closely related to attitudes and behaviors directed toward the supervisor (Cropanzano, Prehar, & Chen, 2002; Masterson et al., 2000; Rupp & Cropanzano, 2002). Therefore, interactional justice has the potential to mediate the relationship between ethical leadership and employee work outcomes. However, currently, there is a knowledge gap regarding the role of interactional justice as a mediator of that relationship. Thus, the

following section summarizes the definition and dimensions of organizational justice, and then focuses on interactional justice by reviewing its measurement, constructs, antecedents, and consequences.

2.3.1 Definitions and Dimensions of Organizational Justice

Organizational justice was introduced by Greenberg (1987) by presenting theories of two independent dimensions to describe employees' perceptions of fairness, and their applicability to organizations in term of attitudes and behaviors. The two dimensions of organizational justice were a reactive–proactive dimension and a process–content dimension (Greenberg, 1987). Currently, the term "organizational justice" in research articles refers to three distinct forms of fairness perception: distributive justice, procedural justice, and interactional justice (Cohen-Charash & Spector, 2001; Colquitt et al., 2001).

Distribution justice is the initially of fairness perception used in social sciences researches that the scholars focused on how the organizations distributed the resource to their employees (Adams, 1965; Homan, 1961; Levanthal, 1976). Procedural justice refers to the perceived fairness of procedures as the basis of decision making (Levanthal, 1980; Levanthal, Karuza, & Fry, 1980; Thibaut & Walker, 1975). Interactional justice was introduced by Bies and Moag (1986) and defined as the perception of fairness of the interaction and communication that the employees receive from their supervisors. Greenberg (1993a) introduced interactional justice via two aspects: interpersonal justice and informational justice. Greenberg (1993b, 1994) concluded that the two types of interactional justice had independent effects. Interpersonal justice is the perception of politeness, dignity, and respect from the person with whom one is communicating. Informational justice comprises the details and completeness of the information communicated to people. Individuals perceive they are being unfairly treated when they believe that communication is incomplete or lacking in detail.

Many scholars advocate that there are three dimensions of organizational justice: distributive justice, procedural justice, and interactional justice (Carter et al., 2014; Gillet, Fouquereau, Bonnaud-Antignac, Mokounkolo, & Colombat, 2013; Gumusluoglu et al., 2013; Niehoff & Moorman, 1993; Wu et al., 2012; Zoghbi-

Manrique-de-Lara & Suárez-Acosta, 2014). While, Colquitt (2001) concluded that there are four dimensions of organizational justice as interactional justice has two dimensions—informational justice and interpersonal justice—that are different constructs and have different effects on employee outcomes. Other scholars have argued that there are two dimensions of fair procedures: the type of justice and the source of justice (Blader & Tyler, 2003). The source of justice is based on the organization versus the manager or supervisor (Rupp & Cropanzano, 2002).

The dominant theory that describes employees' perceptions of justice and work outcomes is social exchange theory (Blau, 1964). This theory suggests that when employees receive supportive behaviors from authority, this is viewed as a benefit, and employees have an obligation to reciprocate, which can be expressed by positive attitudes and behaviors. The implications of social exchange for organizational justice have been well established by many scholars (Konovsky & Pugh, 1994; Moorman, 1991). Researchers have suggested that organizational justice—particularly procedural and interactional justice—facilitates social exchange relationships (Moorman, Blakely, & Niehoff, 1998; Pillai, Schriesheim, & Williams, 1999). The consequences of these relationships are linked to positive work outcomes (Niehoff & Moorman, 1993; Wayne, Shore, Bommer, & Tetrick, 2002).

2.3.2 Construct and Measure of Interactional Justice

After the introduction of interactional justice by Bies and Moag (1986), there were some initial studies on interactional justice constructs (Bies & Shapiro, 1988), whereby scholars attempted to differentiate interactional justice from procedural and distribution justice. Later, Moorman (1991) developed items for the perception of interactional justice from the procedural justice through the work of Bies and colleagues (Bies, 1987; Bies & Moag, 1986; Tyler & Bies, 1990). These items included perceptions of supervisors' kindness, truthful manner when dealing with employees, consideration of employees' right, and willingness to provide information about the decisions they made. The research findings indicated that interactional justice was distinct from procedural and distribution justice (Moorman, 1991). Interactional justice measurement by Moorman (1991) was subsequently contributed the most commonly used in social science researches (e.g., Carter et al., 2014; Gillet et al., 2013;

Gumusluoglu et al., 2013; Niehoff & Moorman, 1993; Wu et al., 2012; Zoghbi-Manrique-de-Lara & Suárez-Acosta, 2014).

Colquitt (2012) argued that, although the measurement by Moorman (1991) drew attention to interactional justice, the debate about differentiating interactional and procedural justice remained, with some scholars combining interactional and procedural justice dimensions due to high inter-correlations (Mansour-Cole & Scott, 1998; Skarlicki & Latham, 1987).

In order to clarify these issues, Colquitt (2001) developed measurements of each dimensions of organizational justice, including the two type of interactional justice (informational and interpersonal justice). These measurements were based on seminal works of each construct from previous scholars (Bies & Moag, 1986; Leventhal, 1976, 1980; Shapiro, Buttner, & Barry, 1994; Thibaut & Walker, 1975). The measurements were validated in a university setting and field setting. Confirmatory factor analyses in the two independent sample settings indicated that a four-factor measurement (of distribution, procedural, informational, and interpersonal justice) fitted the data significantly and more successfully than a one-, two-, or three-factor measurement. The findings also indicated the different degree of the effects of each justice dimension. The study showed that two types of interactional justice–informational justice and interpersonal justice– had factorial distinction (Colquitt, 2001) and both contributed unique effects to employee outcomes (Colquitt, 2001; Colquitt et al., 2001). Therefore, research should not combine these dimensions into one instrument.

2.3.3 Antecedents of Interactional Justice

Within an organization, there are many possible sources of employee justice perception (Liao & Rupp, 2005). Malatesta and Byrne (1997) suggested that employees' perceptions of interaction justice toward their supervisor are linked to employee work outcomes. They emphasized that interactional justice is seen as coming directly from the supervisor as the source of justice, which influences employee outcomes toward the supervisor. Examples of outcomes toward the supervisor include performance and supervisory-directed organizational citizenship behavior. A number

of scholars have advocated this concept (Byrne, 1999; Cropanzano et al., 2002; Masterson et al., 2000; Rupp & Cropanzano, 2002).

Moreover, a number of leadership studies have demonstrated that many leadership styles have a positive relationship with employee perceptions of interactional justice toward the leader. Example of these leadership styles are authentic leadership (Li, Yu, Yang, Qi, & Fu, 2014), the two components of paternalistic leadership (benevolent and moral leadership) (Wu et al., 2012), transformational leadership (Carter et al., 2014; Gumusluoglu et al., 2013), and ethical leadership (Neubert et al., 2009). Empirical data also indicate that the dark side of leadership predicts employees' perceived interactional un-justice toward the leader. Burton and Hoobler (2011) found that abusive supervisors who demean, belittle, undermine, or invade the privacy of their subordinates had negative relationships with employees' perceived interactional justice toward their leader.

2.3.4 Consequences of Interactional Justice

A number of scholars have concluded that interactional justice is linked to the supervisor as the source of justice, as the consequences of interactional justice are closely linked to attitudes and behaviors directed toward the supervisor, such as supervisor-directed organizational citizenship behaviors (Byrne, 1999; Masterson et al., 2000). Cropanzano et al. (2002) found that interactional justice is linked to supervisor satisfaction, satisfaction with performance appraisal feedback, and job performance (mediated by leader member exchange). Cropanzano et al. also found that interactional justice toward supervisors, as the source of justice, is a better predictor of job performance than procedural justice toward the organization. In addition, interactional justice is positively related to job satisfaction (Masterson et al., 2000), trust in management after reorganization (Kernan & Hanges, 2002), and negatively related to organizational retaliation behaviors (Skarlicki & Folger, 1997).

Colquitt et al. (2001) conducted a meta-analysis from 183 justice studies, including the two types of interactional justice, and found that the two types of interactional justice affected employee work outcomes. However, the degree of their relationship was different with some employee work attitudes and outcomes. Interpersonal justice had a moderate to strong relationship with agent-referenced and

system-referenced evaluation of authority, and job satisfaction. However, it had a weak relationship with organizational commitment and performance. In contrast, informational justice had a moderate to strong relationship with agent-referenced and system-referenced evaluation of authority, job satisfaction, organizational commitment, and organizational citizenship behavior toward individuals, yet a weak relationship with organizational citizenship behavior toward organizations and job performance.

In another study by Liao and Rupp (2005), the findings indicated that both interpersonal justice and informational justice had a relationship with employee attitudes, including affective organizational commitment, affective commitment to the supervisor, satisfaction with organization and supervisor, and citizenship behavior that benefits the organization and supervisor.

2.4 Relationship between Ethical Leadership and Employee Work Attitudes

Employee work attitudes are important and have the potential to influence the efficiency and effectiveness of organizations (Meyer & Herscovitch, 2001). Both organizational commitment and job satisfaction are linked to desired organizational outcomes, such as organizational citizenship behavior and employee turnover (Cetin et al., 2015; Fassina et al., 2008; Kinicki et al., 2002; Riketta, 2002). Previous studies have emphasized factorial distinction and the different effects of organizational commitment and commitment to the supervisor (Becker, 1992; Becker et al., 1996; Vandenberghe et al., 2004). Therefore, this study investigated the relationship between ethical leadership and three employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction.

Bedi et al. (2016) argued that many scholars have explained the effects of ethical leadership on employee work outcomes via social exchange theory (Blau, 1964). With reference to this research framework, ethical leadership influences employee work attitudes through a social exchange relationship. When employees receive concern and care and are treated fairly by their leaders, they feel a need to reciprocate with a positive work attitude toward the leader and organization. In the next section, is comprised of

previous studies examining the relationship between ethical leadership and the employee work attitudes of affective organizational commitment, affective commitment to the supervisor, and job satisfaction.

2.4.1 Relationship between Ethical Leadership and Affective Organizational Commitment

Previous empirical studies demonstrated that ethical leadership has a positive relationship with affective organizational commitment in various contexts, particularly North America. Examples include a study conducted in various organizations that incorporate ethics or corporate social responsibility into their organizational website (Neves & Story, 2015), and hotel services (Kim & Brymer, 2011; Neubert, Wu, & Roberts, 2013).

The studies to investigate relationship of ethical leadership and affective commitment were also conducted out of North America, the results were congruent with the studies conducted in North America. Examples include a study conducted in the aviation industry in Malaysia (Tahernejad et al., 2015) and Turkey (Demirtas & Akdogan, 2015), the banking and insurance sector in Spain (Ruiz-Palomino, Ruiz-Amaya, & Knörr, 2011), the railway organization in the Democratic Republic of Congo in Central Africa (Mitonga-Monga & Cilliers, 2016), and the banking sector in China (Loi, Lam, Ngo, & Cheong, 2015). Table 2.4 presents the correlation between ethical leadership and affective organizational commitment reported from these studies.

Some studies have explored the variables that mediate the relationship between ethical leadership and affective organizational commitment. For example, the studies by Demirtas and Akdogan (2015), and Neubert et al. (2009) found that ethical climate partially mediates the relationship between ethical leadership and affective organizational commitment. Another study exploring leader member exchange as the mediator (Hassan, Mahsud, Yukl, & Prussia, 2013) found a partial mediator role of leader member exchange in the relationship between ethical leadership and affective organizational commitment.

Table 2.4 Relationship between Ethical Leadership and Affective Organizational Commitment

Country	n	*r*	Researchers
North America	250	0.50	Neubert et al. (2009)
North America	224	0.45	Neves and Story (2015)
Spain	525	0.41	Ruiz-Palomino et al. (2011)
Central Africa	839	0.67	Mitonga-Monga and Cilliers (2016)
China	176	0.52	Loi et al. (2015)

Note: n = number of participants in the study; all correlations were significant at $p < 0.01$; r = correlation coefficient.

2.4.2 Relationship between Ethical Leadership and Affective Commitment to the Supervisor

As mentioned, previous studies indicated that affective organizational commitment and affective commitment to the supervisor are distinct in terms of the construct and effects on employee outcomes (Becker, 1992; Becker et al., 1996; Vandenberghe et al., 2004). To date, limited studies have investigated the effects of ethical leadership on employee affective commitment to the supervisor. Hansen et al. (2013) conducted a multi-foci study in the context of ethical leadership and affective commitment to both organizations and supervisors in the United States. The results demonstrated that supervisory ethical leadership (employees' perceptions of their direct supervisor as an ethical leader) influenced employees' affective commitment to the supervisor. Moreover, supervisory ethical leadership mediated the relationship between organizational ethical leadership (employees' perception of top management as ethical leadership) and affective organizational commitment. The results indicated a good correlation between supervisor ethical leadership and affective commitment to the supervisor ($r = 0.69$, $p < 0.01$).

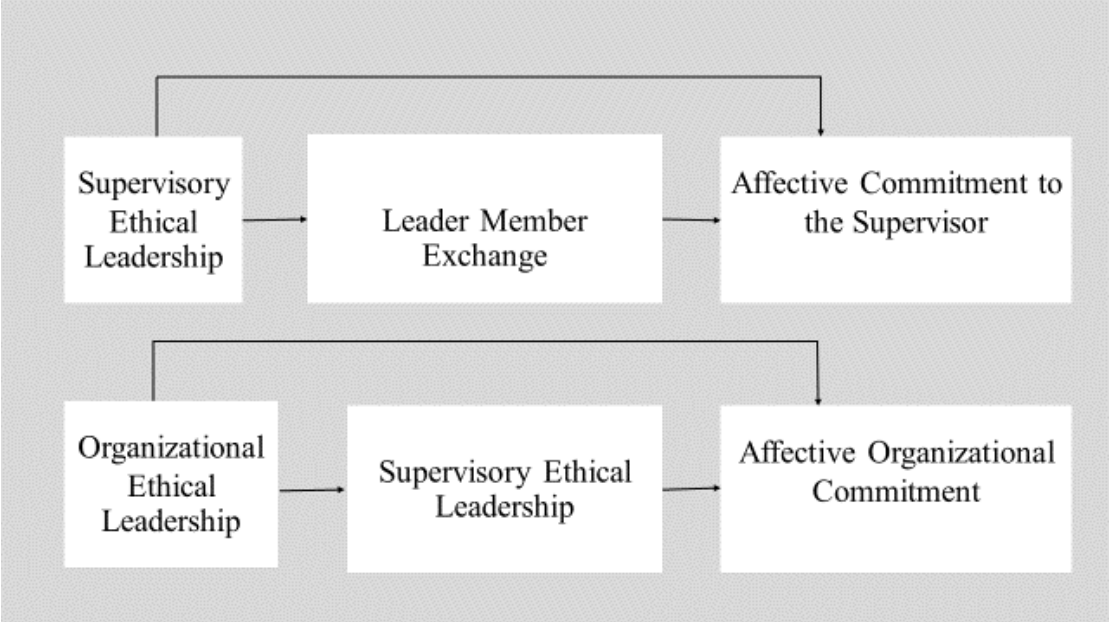

Figure 2.4 Relationship between Supervisory Ethical Leadership and Affective Commitment to Supervisor, and Mediating Roles of Supervisory Ethical Leadership

Source: Hansen et al., 2013.

2.4.3 Relationship between Ethical Leadership and Job Satisfaction

Studies on ethical leadership have been conducted in several contexts and cultures, yet all results have demonstrated a positive relationship between ethical leadership and employee job satisfaction. In North America, studies were conducted in several contexts, such as internet services (Neubert et al., 2009), college alumni or university alumni (Avey, Wernsing, & Palanski, 2012; Evans, Allen, & Clayton, 2016; Palanski, Avey, & Jiraporn, 2014), and hotel industries (Kim & Brymer, 2011). Moreover, studies have been conducted outside of North America, such as in Spain (Ruiz et al., 2011), Taiwan (Yang, 2014), Turkey (Celik, Dedeoglu, & Inanir, 2015), China (Tu, Lu, & Yu, 2016), Columbia (Páez & Salgado, 2016), and Malaysia (Tahernejad et al., 2015). Table 2.5 demonstrates the relationship between ethical leadership and job satisfaction, indicating that the level of those relationships appeared to vary in different cultures.

Table 2.5 Relationship between Ethical Leadership and Job Satisfaction

Country	n	*r*	Researchers
North America	250	0.44	Neubert et al. (2009)
North America	233	0.58	Evans et al. (2016)
North America	845	0.37	Avey et al. (2012)
Spain	525	0.48	Ruiz-Palomino et al. (2011)
North America	939	0.37	Palanski et al. (2014)
Turkey	391	0.81	Celik et al. (2015)

Note: n = number of participants in the study; all correlations were significant at $p < 0.01$; *r* = correlation coefficient.

In summary, the existing empirical studies demonstrated a strong relationship between ethical leadership and employee work attitudes (affective organizational commitment, affective commitment to the supervisor, and job satisfaction) across various industries and culture. These previous studies indicated different effects of affective organizational commitment and affective commitment to the supervisor (Becker, 1992; Becker et al., 1996); thus, both foci of affective commitment have different influences on employee outcomes.

While there have some studies of ethical leadership in ASEAN countries (Ofori, 2009; Tahernejad et al., 2015), there have been limited ethical leadership studies in Thailand, particularly in the private sector. Although the construct of ethical leadership and the relationship between ethical leadership and employee attitudes seem to be universal (Bedi et al., 2016; Brown & Trevino, 2006), the level of relationship may differ. In addition, there has been limited research exploring the relationship between ethical leadership and affective commitment to the supervisor (Hansen et al., 2013). Based on the literature review, there are empirical data showing that some variables—such as ethical culture and leader member exchange—mediate the relationship between ethical leadership and employee outcomes (Demirtas & Akdogan, 2015; Hassan et al., 2013; Neubert et al., 2009). Thus, more studies are needed to explore other important variables, such as the mediating role of interactional justice, in order to enhance

knowledge of the relationship between ethical leadership and employee outcomes, and its organizational implications.

2.5 Relationship between Ethical Leadership and Interactional Justice

Many scholars have concluded that interactional justice is seen to come directly from the supervisor as a source of justice (Byrne, 1999; Cropanzano et al., 2002; Masterson et al., 2000; Rupp & Cropanzano, 2002). Although a number of studies have demonstrated the relationship between leaders and interactional justice (Carter et al., 2014; Gumusluoglu et al., 2013; Li et al., 2014; Wu et al., 2012), there are limited studies exploring the relationship between interactional justice and ethical leadership (Neubert et al., 2009; Potipiroon & Faerman, 2016).

Moorman (1991) developed an interactional justice measurement from the work of Bies and colleagues (Bies, 1987; Bies & Moag, 1986; Tyler & Bies, 1990). Further, Colquitt (2001) concluded that there are two types of interactional justice—informational and interpersonal justice—and these have different constructs and different effects on employee outcomes. Thus, the existing studies of interactional justice are categorized into two types: 1) one dimension of interactional justice studies and 2) two dimensions of justice—informational and interpersonal justice.

The study by Neubert et al. (2009) explored the relationship between interactional justice and ethical leadership, and the results demonstrated that interactional justice is positively related to ethical leadership. Another study by Potipiroon and Faerman (2016) investigated the relationship between interpersonal justice and ethical leadership, and indicated that interpersonal justice is positively related to ethical leadership. Since there are limited studies exploring the relationship between ethical leadership and interactional justice, particularly the two forms of interactional justice (informational and interpersonal justice), research that explores this relationship would add value to the field of ethical leadership and interactional justice. Figure 2.5 presents a summary of the relationship between ethical leadership and interactional justice from previous research (Neubert et al., 2009; Potipiroon & Faerman, 2016).

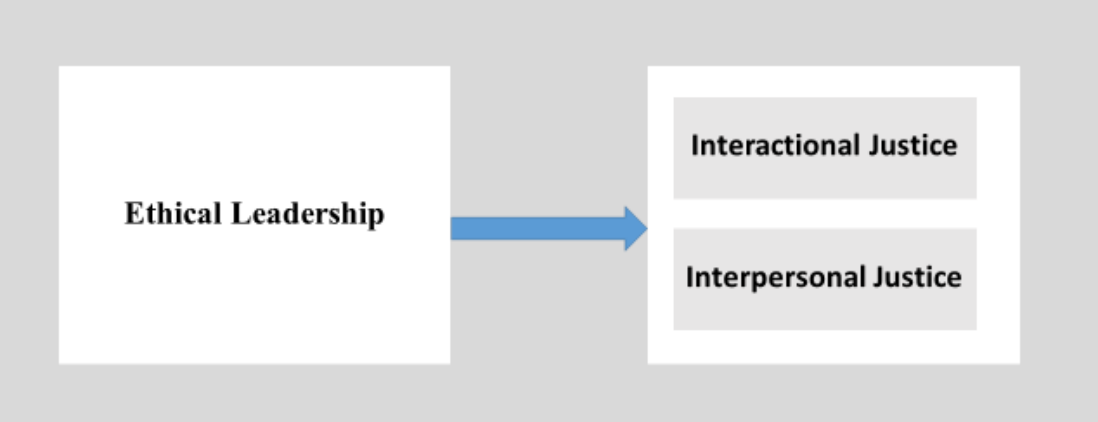

Figure 2.5 Relationship between Ethical Leadership and Interactional Justice
Source: Neubert et al., 2009; Potipiroon & Faerman, 2016.

2.6 Relationship between Interactional Justice and Employee Work Attitudes

Social exchange theory (Blau, 1964) is the theory used by many scholars to describe the effect of interactional justice and employee work outcomes (Konovsky & Pugh, 1994; Moorman, 1991). When employees perceive fairness in the interactions with their supervisor, they feel obliged to reciprocate, which can be expressed by positive attitudes and behaviors. Interactional justice is proven to be closely linked to attitudes and behaviors related to the supervisor, such as supervisory-related citizenship behavior (Byrne, 1999; Masterson et al., 2000). More studies are needed to investigate the relationship between interactional justice and affective commitment to the supervisor, as it is one of the important factors linked to organizational desired outcomes (Vandenberghe et al., 2004).

Some scholars have argued that both interactional justice forms demonstrate a link to employee work attitudes, including affective organizational commitment, affective commitment to the supervisor, and job satisfaction. However, the degree of their relationship is different (Colquitt et al., 2001; Liao & Rupp, 2005). This section reviews the empirical data from previous studies that demonstrate the relationship

between interactional justice (in both the one dimension and two dimensions of interactional justice) and employee attitudes.

2.6.1 Relationship between Interactional Justice and Affective Organizational Commitment

There are substantial empirical data showing a positive relationship between interactional justice and affective organizational commitment (e.g. Kuvaas, 2008; Mishra, Mishra, & Grubb, 2015; Moon, Hur, Ko, Kim, & Yoon, 2014; Neubert et al., 2009; Ravangard, Sajjadnia, & Ansarizade, 2013). Previous studies were conducted in many cultures, including in Asia, such as China (Lee & Wei, 2015; Wu & Wang, 2008), Hong Kong (Ehrhardt, Shaffer, Chiu, & Luk, 2012), and South Korea (Daly, DuBose, Owyar-Hosseini, Baik, & Stark, 2015). The research findings from these studies were congruent with the studies conducted in Western countries (e.g., Kuvaas, 2008; Neubert et al., 2009). These congruent findings from various cultures are seen to imply a link between interactional justice and employees' emotional attachment to organizations in many cultures. Table 2.6 depicts the degree of the relationship between interactional justice and affective organizational commitment from previous studies.

Table 2.6 Relationship between Interactional Justice and Affective Organizational Commitment

Country	*r*	Researchers
North America	0.53	Neubert et al. (2009)
North America	0.51	Mishra et al. (2015)
Norway	0.31	Kuvaas (2008)
Korea	0.41	Daly et al. (2015)
Korea	0.58	Moon et al. (2014)
China	0.50	Lee and Wei (2015)
China	0.52	Wu and Wang (2008)
Hong Kong	0.44	Ehrhardt et al. (2012)

Note: *r* = correlation coefficient.

Some researchers have explored the relationship between each form of interactional justice and affective organizational commitment, with the findings indicating that both informational and interpersonal justice have a positive relationship with affective organizational commitment (Jones & Martens, 2009; Marzucco, Marique, Stinglhamber, De Roeck, & Hansez, 2014). These relationships are congruent with a longitudinal study with 12-month time lag in organizational change conducted by Shin, Seo, Shapiro, and Taylor (2015). The findings demonstrated that both informational and interpersonal justice climate had a positive relationship with affective organizational commitment during organizational change. Table 2.7 reports the degree of those relationships.

Table 2.7 Relationship between Each Type of Interactional Justice and Affective Organizational Commitment

***r*1**	***r*2**	**Researchers**
0.28	0.33	Marzucco et al.(2014)
0.26	0.29	Jones and Martens (2009)
0.32	0.33	Shin et al. (2015)

Note: *r*1 = correlation coefficient of informational justice and affective organizational commitment; *r2* = correlation coefficient of interpersonal justice and affective organizational commitment.

A previous study explored the difference in males and females in the link between the four types of organizational justice and employee outcomes, and found that the female and male employees had different responses to perceptions of justice. For men, interpersonal justice predicted affective organizational commitment, while, for women, informational justice was found to increase affective organizational commitment. The researchers concluded that the different types of justice would be considered in future research (Jepsen & Rodwell, 2012).

2.6.2 Relationship between Interactional Justice and Affective Commitment to the Supervisor

Empirical data have indicated differences in the construct of organizational commitment and commitment to the supervisor (Becker, 1992; Becker et al., 1996). A previous study showed that both foci of affective commitment had different effects on employee outcomes. Affective commitment to the supervisor had direct effects on supervisor-related tasks, such as job performance (Vandenberghe et al., 2004). While there are substantial data showing that interactional justice has a positive relationship with affective organizational commitment (e.g., Kuvaas, 2008; Mishra et al., 2015; Moon et al., 2014; Neubert et al., 2009; Ravangard et al., 2013), less research has indicated a relationship between interactional justice and affective commitment to the supervisor (Göncü, 2014; Stinglhamber & De Cremer, 2008).

Stinglhamber and De Cremer (2008) conducted a study in the Netherlands using structural equation modeling for data analysis. They found that employees' perceived interactional justice toward their supervisor influenced both affective commitment to the supervisor and affective organizational commitment. However, the degree of the relationship between interactional justice and affective commitment to the supervisor was stronger than the degree of the relationship between interactional justice and affective organizational commitment.

Another study conducted by Göncü (2014) found that both informational and interpersonal justice had a positive relationship with affective commitment to the supervisor. However, the degree of the relationship between informational justice and affective commitment to the supervisor ($r = 0.71$, $p < 0.001$) was higher than the degree of the relationship between interpersonal justice and affective commitment to the supervisor ($r = 0.61$, $p < 0.001$).

2.6.3 Relationship between Interactional Justice and Job Satisfaction

According to the research undertaken in the field of interactional justice, a high level of interactional justice affects employees' job satisfaction (Masterson et al., 2000). These results are congruent with the meta-analysis results from 24 studies in field setting and laboratory setting, which demonstrated a positive relationship between interactional justice and job satisfaction (Cohen-Charash & Spector, 2001). Several

interactional justice studies have been conducted in various cultures and demonstrated the positive relationship between interactional justice and employees' job satisfaction. Examples include studies conducted in Turkey (Bayarçelik & Findikli, 2016), the Philippines (Sia & Tan, 2016), China (Lam & Chen, 2012), Malaysia (Ismail & Shariff, 2008), India (Choudhary, Deswal, & Philip, 2013), the United Arab Emirates (Fernandes & Awamleh, 2006), Iran (Sheykhshabani & Beshlideh, 2011), Ireland (Heffernan & Dundon, 2016), and North America (Andrews, Baker, & Hunt, 2008; Neubert et al., 2009). Table 2.8 presents the level of relationship between interactional justice and job satisfaction from previous studies. According to the correlation coefficient (*r*) from previous studies, as indicated in Table 2.8, the level of relationship between interaction justice and job satisfaction was ranked from moderate to high (*r* = 0.45 to 0.71).

Table 2.8 Relationship between Interactional Justice and Job Satisfaction

Country	n	*r*	Researchers
North America	250	0.54	Neubert et al. (2009)
North America	489	0.45	Andrews et al. (2008)
Korea	319	0.48	Daly et al. (2015)
Turkey	294	0.65	Bayarçelik and Findikli (2016)
Malaysia	917	0.46	Ismail and Shariff (2008)
Ireland	187	0.62	Heffernan and Dundon (2016)
India	179	0.51	Aryee, Budhwar, and Chen (2002)
United Arab Emirates	302	0.71	Fernandes and Awamleh (2006)

Note: n = number of participants in the study; *r* = correlation coefficient.

Previous studies have investigated the relationship between each form of interactional justice (informational and interpersonal justice) and job satisfaction (Jepsen & Rodwell, 2012; Marzucco et al., 2014; Mayer, Nishii, Schneider, & Goldstein, 2007; McNall & Roch, 2009). The research findings demonstrated that both

forms of interactional justice had a positive relationship with employees' job satisfaction.

Table 2.9 shows the correlation coefficient of the relationship between informational justice and job satisfaction, and between interpersonal justice and job satisfaction. It is interesting to note that the degree of the relationship was not consistent in each study. Some studies found that the degree of the relationship between informational justice and job satisfaction was higher than that between interpersonal justice and job satisfaction (Jepsen & Rodwell, 2012; Mayer et al., 2007). In contrast, some studies found that the degree of the relationship between interpersonal justice and job satisfaction was higher than that between informational justice and job satisfaction (Jones & Martens, 2009; Marzucco et al., 2014; McNall & Roch, 2009). Interestingly, the findings from the study by Jepsen and Rodwell (2012) seem to imply that the relationship between interactional justice (both informational and interpersonal justice) and job satisfaction in the female group was higher than that in the male group.

Table 2.9 Relationship between Each Type of Interactional Justice and Job Satisfaction

***r*1**	***r*2**	**Researchers**
0.28	0.33	Marzucco et al. (2014)
0.26	0.29	Jones and Martens (2009)
0.32	0.33	Shin et al. (2015)
0.31	0.31	Jones and Martens (2009)
0.43[a]	0.38[a]	Jepsen and Rodwell (2012)
0.40[b]	0.33[b]	Jepsen and Rodwell (2012)
0.37	0.42	McNall and Roch (2009)
0.29	0.27	Mayer et al. (2007)

Note: *r*1 = correlation coefficient of informational justice and job satisfaction; *r*2 = correlation coefficient of interpersonal justice and job satisfaction; [a] = study results from female group; [b] = study results from male group.

2.7 Chapter Summary

This chapter has presented a literature review with an overview of the studied variables, including the variables' definitions, measurement, and theoretical background, in order to indicate how the study variables were constructed. Moreover, the literature review has encompassed the relevant research on ethical leadership and all the study variables in order to develop the research framework and hypotheses.

An ethical leader is considered a "Moral person and moral manager," who is consistently moral in his or her actions, and uses tools to promote ethical conduct in the organization (Trevino et al., 2000). The results from previous qualitative studies indicated that the elements of ethical leadership include both transformational and transactional leadership. The transformational component refers to leaders being role models and focusing on ethical values, while the transactional component refers to using reward and punishment to guide ethical behavior (Trevino et al., 2003).

Ethical leadership definition and ethical leadership scales (ELS) was developed by Brown et al. (2005). ELS has been widely used in ethical leadership studies, and the results from previous studies demonstrate that ethical leadership is an effective style of leading that affects employees' key attitudes (Hansen et al., 2013; Neubert et al., 2013). Charoensap (2015) extended the work from Brown et al. (2005) by developing additional items related to ethical decision making, which led to the measurement called the "extended-ELS." This literature review indicated that ethical leadership had a positive relationship with all the studied work attitudes—affective organizational commitment, affective commitment to the supervisor, and job satisfaction.

In parallel, interactional justice is important because it is linked to desired organizational outcomes. Colquitt (2001) concluded that there are two forms of interactional justice: informational and interpersonal justice. This literature review indicated that interactional justice is linked to leaders, including ethical leadership (Neubert et al., 2009; Potipiroon & Faerman, 2016). In addition, interactional justice has a positive relationship with employee work attitudes.

This study aimed to validate the effect of ethical leadership on employee work attitudes—affective organizational commitment, affective commitment to the

supervisor, and job satisfaction. This study also aimed to contribute theoretical knowledge of interactional justice by exploring the two types of interactional justice—information and interpersonal justice—as mediators of the relationship between ethical leadership and employee work attitudes. The next chapter describes the study methodology, including the development of the study measure and hypotheses testing.

CHAPTER 3

RESEARCH METHODOLOGY

This chapter presents the research methodology to explain how the research was conducted and data were collected. This includes discussing: 1) the conceptual framework and hypotheses drawn from the literature review; 2) the measurement tools, including definitions of the key terms used in the measurement tools and an overview of each measurement; 3) the pilot study, which aimed to develop the measurement tool in the Thai context, including a new measurement of ethical leadership; 4) the study sample; and 5) the data analysis undertaken in this study.

3.1 Conceptual Framework and Hypotheses

According to the literature review in Chapter 2, existing studies have indicated the positive effects of ethical leadership on employee work attitudes. The literature review on interactional justice demonstrated that interactional justice is directly related to the supervisor and correlated with employee outcomes (Colquitt et al., 2001; Masterson et al., 2000). Interactional justice can mediate the effects of ethical leadership on employee work attitudes. In addition, previous studies concluded that the two types of interactional justice are distinct constructs and have different effects on employee outcomes.

This study proposed that ethical leadership has a direct effect on employee work attitude outcomes—affective organizational commitment, affective commitment to the supervisor, and job satisfaction. The study also proposed that ethical leadership has an indirect effect on employee work attitudes via the two types of interactional justice: informational and interpersonal justice. Figure 3.1 presents the conceptual framework of the overall relationship and the interactions between the variables.

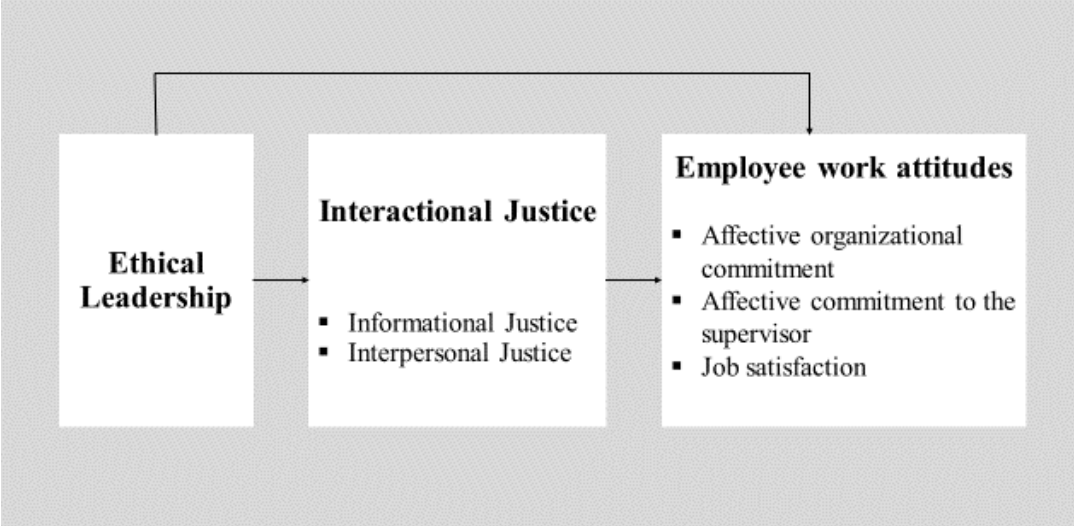

Figure 3.1 Research Framework

The research framework in Figure 3.1 depicts the overall study framework, and this study's specific research questions and hypotheses, as discussed below.

Research Question 1: Does ethical leadership affect employee work attitudes—affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

Hypothesis 1a: Ethical leadership has a direct effect on affective organizational commitment.

Hypothesis 1b: Ethical leadership has a direct effect on affective commitment to the supervisor.

Hypothesis 1c: Ethical leadership has a direct effect on employee job satisfaction.

Research Question 2: Do perceptions of interactional justice (informational and interpersonal justice) partially mediate the effects of ethical leadership and employee work attitudes—affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

Hypotheses 2a: Informational justice partially mediates the effect of ethical leadership on affective organizational commitment.

Hypotheses 2b: Informational justice partially mediates the effect of ethical leadership on affective commitment to the supervisor.

Hypotheses 2c: Informational justice partially mediates the effect of ethical leadership on job satisfaction.

Hypotheses 2d: Interpersonal justice partially mediates the effect of ethical leadership on affective organizational commitment.

Hypotheses 2e: Interpersonal justice partially mediates the effect of ethical leadership on affective commitment to the supervisor.

Hypotheses 2f: Interpersonal justice partially mediates the effect of ethical leadership on job satisfaction.

3.2 Measurement Tools

The data were collected through a questionnaire with a self-report format. All questions related to the variables—ethical leadership, affective organizational commitment, affective commitment to the supervisor, job satisfaction, informational justice, and interpersonal justice—were included. This section discusses the definitions of the key terms used in the measurement tools and the questionnaires for each measurement.

3.2.1 Definitions of Key Terms Used in the Measurement Tools

3.2.1.1 Ethical Leadership

This study used the definition of ethical leadership developed by Brown et al. (2005, p. 120): “the demonstration of normatively appropriate conduct through personal actions and interpersonal relationships, and the promotion of such conduct to followers through two-way communication, reinforcement and decision-making”. The measurement of ethical leadership that has been widely used in research is the ELS developed by Brown et al. (2005). However, the study employed the new measurement

by Charoensap (2015) to measure ethical leadership. This measurement extended the seminal work of ELS by Brown et al. (2005). An additional three items were developed and tested by Charoensap (2015) to encompass ethical decision-making processes. These items were developed based on previous qualitative research (Charoensap et al., 2015) and covered the four components of ethical decision making (Rest, 1986). These items were added to the existing ELS, and the new measure was labelled the "extended-ELS" (Charoensap, 2015).

3.2.1.2 Affective Organizational Commitment

This study examined affective commitment, which is one of the three components of organizational commitment developed by Meyer et al. (1993). Affective organizational commitment is defined as an "employee's emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so" (Meyer & Allen, 1991, p. 67).

3.2.1.3 Affective Commitment to the Supervisor

Previous studies have emphasized factorial distinction and the different effects of organizational commitment and commitment to the supervisor (Becker, 1992; Becker et al., 1996). This study adapted affective commitment to the supervisor from affective commitment developed by Meyer et al. (1993). The definition of affective commitment to the supervisor was applied from Meyer and Allen (1991), in which employees have emotional attachment to and involvement with their supervisor. It is defined as: "the employee's emotional attachment to, identification with, and involvement in the supervisor. Employees with a strong affective commitment continue working with the supervisor because they want to do so" (Meyer & Allen, 1991, p. 67).

3.2.1.4 Job Satisfaction

Job satisfaction has been viewed through various concepts and definitions. It is viewed as either a singular or multidimensional construct. The singular construct consists of general scales of job satisfaction used to estimate general overall feelings about the job. The multidimensional construct consists of specific facet scales used to examine areas of job satisfaction separately. This study defined job satisfaction as overall general job satisfaction toward one's work (Brayfield & Rothe, 1951).

3.2.1.5 Interactional Justice: Informational and Interpersonal Justice

Interactional justice has two components: interpersonal and informational justice. Interpersonal justice refers to how individuals perceive they are treated—whether they are treated with politeness, dignity, and respect by those in authority (their supervisors). Informational justice refers to the adequacy of explanations of work procedure given by their supervisors in terms of timeliness, specificity, and truthfulness (Colquitt, 2001; Colquitt et al., 2001).

3.2.2 Overview of Questionnaires

The data were collected using a questionnaire with a self-report format. All questions related to the variables—ethical leadership, affective organizational commitment, affective commitment to the supervisor, and job satisfaction—were included. The scale of ethical leadership was adapted from ELS by Brown et al. (2005) and the additional three items from Charoensap (2015). Both the affective organizational commitment and affective commitment to the supervisor scales were adapted from Meyer et al. (1993). The job satisfaction scale was adapted from Judge, Bono, and Lock (2000), which was originally developed by Brayfield and Rothe (1951). The informational justice and interpersonal justice scales were adapted from Colquitt (2001).

These measurements were first translated into Thai, and then back-translated by two members of the research committee who were fluent in both Thai and English, in order to ensure content accuracy. An expert in ethics and organizational behavior research was asked to check the contents of all the items. The questionnaire instructions indicated that there were no right or wrong answers, and that answers would be kept confidential in order to reduce common method bias, as suggested by Podsakoff, MacKenzie, Lee, and Podsakoff (2003). The questionnaires (see Appendix A) were divided into four parts. Part 1 requested the demographic information of the participants; Part 2 requested the demographic information of the participants' supervisor; and Parts 3 and 4 asked about the employees' attitudes and perceptions toward their leader, which consisted of 38 items from six variables. All the variable items in this study were rated on a five-point scale ranging from 1 (strongly disagree)

to 5 (strongly agree). A summary of the study measurement variables and participant information is provided below.

3.2.2.1 Ethical Leadership

This study used the extended-ELS—a measure of ethical leadership comprising 13 items, including the 10 items developed by Brown et al. (2005) and the additional three items developed by Charoensap (2015), who developed, tested, and validated the extended-ELS with employee work attitudes. Using a separate sample of 100 participants, the extended-ELS demonstrated excellent internal consistency (Cronbach's alpha = 0.94). Exploratory factor analysis (EFA) was also performed and the results indicated that one component factor accounted for 55.98% of the variance explained (see Appendix C.1). The extended-ELS demonstrated excellent internal consistency, with a Cronbach's alpha of 0.95, which was comparable to the ELS, with a Cronbach's alpha of 0.93. Table 3.1 shows the Cronbach's alpha of previous studies using the ELS developed by Brown et al. (2005) and the extended-ELS (Charoensap, 2015).

Table 3.1 Reliability Coefficient Values from Studies Employing ELS and Extended-ELS

Cronbach's Alpha	Instrument	Researchers
0.96	ELS	Brown et al. (2005)
0.81	ELS	Kalshoven et al. (2011)
0.86	ELS	Walumbwa, Morrison, and Christensen (2012)
0.78	ELS	Kacmar, Andrews, Harris, and Tepper (2013)
0.90	ELS	Chughtai, Byrne, and Flood (2014)
0.82	ELS	Demirtas (2015)
0.93	ELS	Charoensap (2015)
0.95	Extended-ELS	Charoensap (2015)

Note: The study by Charoensap (2015) was in the Thai language.

The additional three items by Charoensap (2015) are related to ethical decision making. These items are: “My supervisor is willing to do the right things and is responsible for the results,” “My supervisor participates in actions and overcomes obstacles in order to meet ethical standards,” and “My supervisor appreciates and recognizes employees that behave in an ethical manner.” Table 3.2 shows the items of the extended-ELS.

Table 3.2 Items of Extended-ELS

Items
1. My supervisor listen to what employees have to say
2. My supervisor disciplines employees who violate ethical standards
3. My supervisor conducts his/her personal life in an ethical manner
4. My supervisor has the best interests of employees in mind
5. My supervisor makes fair and balanced decisions
6. My supervisor can be trusted
7. My supervisor discusses business ethics or values with employees
8. My supervisor sets an example of how to do things the right way in terms of ethics
9. My supervisor defines success not just by results but also the way that they are obtained
10. When making decisions, my supervisor asks, “what is the right thing to do?”
11. My supervisor is willing to do the right things and is responsible for the results
12. My supervisor participates in actions and overcomes obstacles in order to meet ethical standards
13. My supervisor appreciates and recognizes the employees who behave in an ethical manner

Note: Items 1 to 10 were adapted from Brown et al. (2005); items 11 to 13 were adapted from Charoensap (2015).

3.2.2.2 Affective Organizational Commitment

The three components of organizational commitment developed by Allen and Meyer (1990) have been widely used in organizational commitment research over

a number of years because they capture the multidimensional nature of organizational commitment (Meyer et al., 2002). Allen and Meyer (1990) developed eight items to measure each component. This measurement was revised into a six-item scale by Meyer et al. (1993). This study selected the affective organizational commitment developed by Meyer et al (1993) to apply the measurement for both affective organizational commitment and commitment to the supervisor. Table 3.3 shows the Cronbach's alpha of affective organizational commitment scales from previous studies that adapted scales from Meyer et al. (1993).

Table 3.3 Reliability Coefficient Values from Studies Employing Affective Organizational Commitment Scales

Cronbach's Alpha	Researchers
0.94	Herscovitch and Meyer (2002)
0.82	Meyer et al. (2002)
0.82	Vandenberghe et al. (2004)
0.82	Gottlieb, Maitland, and Shera (2013)

Examples of items of affective organizational commitment are: "I would be very happy to spend the rest of my career with this organization" and "I really feel as if this organization's problems are my own." Three of the items are reversed questions, which need recoding for data analysis. These items are: "I do not feel 'emotionally attached' to this organization," "I do not feel like 'part of the family' at my organization," and "I do not feel a strong sense of belonging to my organization." Table 3.4 presents a summary of each item used to measure affective organizational commitment.

Table 3.4 Items of Affective Organizational Commitment

Affective Organization Commitment Items
1. I would be very happy to spend the rest of my career with this organization
2. I really feel as if this organization's problems are my own
3. I do not feel like "part of the family" at my organization (R)
4. I do not feel "emotionally attached" to this organization (R)
5. This organization has a great deal of personal meaning for me
6. I do not feel a strong sense of belonging to my organization (R)

Source: Meyer et al., 1993.

Note: R = reversed question.

3.2.2.3 Affective Commitment to the Supervisor

Affective commitment to the supervisor was adapted from Meyer et al. (1993). A previous study demonstrated good reliability, with a Cronbach's alpha 0.94 (Vandenberghe et al., 2004). Examples of the items of affective commitment to the supervisor are: "I would be very happy to spend the rest of my career with my supervisor" and "I really feel as if my supervisor's problems are my own." Three of the items are reversed questions, which need recoding for data analysis. These items are: "I do not feel like 'part of the team," "I do not feel 'emotionally attached' to my supervisor," and "I do not feel a strong sense of belonging to my supervisor." Table 3.5 provides a summary of each item used to measure affective commitment to the supervisor.

Table 3.5 Items of Affective Commitment to the Supervisor

Affective Commitment to the Supervisor
1. I would be very happy to spend the rest of my career with my supervisor
2. I really feel as if my supervisor's problems are my own
3. I do not feel like "part of the team" (R)
4. I do not feel "emotionally attached" to my supervisor (R)
5. My supervisor has a great deal of personal meaning for me
6. I do not feel a strong sense of belonging to my supervisor (R)

Source: Meyer et al., 1993.

Note: R = reversed question.

3.2.2.4 Job Satisfaction

This study selected the general or global scales of job satisfaction measurement. The measurements for overall job satisfaction widely used in research are categorized into two types: single item and multi-item (Faragher et al., 2005). According to Oshagbemi (1999), the multi-item measurement of job satisfaction is closer to reality than the single item measurement. The study selected job satisfaction based on a previous study by Judge et al. (2000), which used five items applied from Brayfield and Rothe (1951), with a Cronbach's alpha value of 0.89. The reliability report of Brayfield and Rothe's measurement ranged from 0.79 to 0.99 (Moorman, 1991). Table 3.6 presents the previous studies that used or applied the job satisfaction measurement developed by Brayfield and Rothe (1951).

Table 3.6 Reliability Coefficient Values from Studies Employing Job Satisfaction Scales

Cronbach's Alpha	Studies
0.93	Moorman (1991)
0.74	Kalliath and Kalliath (2013)
0.92	Lambert, Minor, Wells, and Hogan (2015)
0.88	Orkibi and Brandt (2015)

An example item is: "I feel fairly satisfied with my present job." Two of the items are reversed questions, which need recoding for data analysis. Those items are: "Each day at work seems like it never end" and "I consider my job to be rather unpleasant." Table 3.7 presents the items for job satisfaction.

Table 3.7 Items of Job Satisfaction Scales

Job Satisfaction Items
1. I feel fairly satisfied with my present job
2. Most days I am enthusiastic about my work
3. Each day at work seems like it never end (R)
4. I find real enjoyment in my work
5. I consider my job to be rather unpleasant (R)

Source: Judge, Bono, & Locke, 2000, p. 241.

3.2.2.5 Interactional Justice: Interpersonal and Informational Justice

Colquitt et al. (2001) concluded that the two forms of interactional justice (interpersonal and informational justice) have factorial distinction, and both forms have different effects on employee outcomes. The internal consistency of the two forms of interactional justice developed by Colquitt (2001) showed good internal consistency, with a Cronbach's alpha of 0.79 for interpersonal justice and 0.79 for informational justice in a study of a university sample. Colquitt also validated these measurements in

a field sample, with the results demonstrating good reliability, with a Cronbach's alpha 0.92 for interpersonal justice and 0.90 for informational justice. Table 3.8 presents the previous studies that used or applied interpersonal justice and informational justice developed by Colquitt (2001).

Table 3.8 Reliability Coefficient Values from Studies Employing Interpersonal Justice and Informational Justice Scales

Interpersonal Justice Cronbach's Alpha	Informational Justice Cronbach's Alpha	Researchers
0.96	0.90	Judge and Colquitt (2004)
0.88	0.93	Enoksen (2015)
0.89	0.87	Caldwell (2014)
0.91	0.94	Díaz-Gracia, Barbaranelli, and Moreno Jiménez (2014)

Examples of the items of interpersonal justice are: "My supervisor has treated me in a polite manner" and "My supervisor has treated me with dignity." Table 3.9 presents the items for interpersonal justice.

Table 3.9 Items of Interpersonal Justice Scales

Interpersonal Justice Items
1. My supervisor has treated me in a polite manner
2. My supervisor has treated me with dignity
3. My supervisor has treated me with respect
4. My supervisor has treated me refrained from improper remarks or comments

Source: Colquitt, 2011, p. 389.

Examples of the items of informational justice are: "My supervisor has been candid in (his/her) communications with me" and "My supervisor has explained the procedures thoroughly." Table 3.10 presents the items for interpersonal justice.

Table 3.10 Items of Informational Justice Scales

Informational Justice Items
1. My supervisor has been candid in (his/her) communications with me
2. My supervisor has explained the procedures thoroughly
3. My supervisor has explained regarding the procedure reasonable
4. My supervisor has communicated detail in a timely manner
5. My supervisor seems to tailor (his/her) communications to individuals' specific needs

Source: Colquitt, 2011, p. 389.

3.2.2.6 Information of Participants

Participants rated their information regarding age, sex, education, organizational tenure, and supervisor tenure, and selected whether their organization had a code of conduct. All information was analyzed using descriptive analysis. Organization tenure was defined as the period in which employees have worked with their current organization. Supervisor tenure was defined as the time employees have worked with their current supervisor. Organizational and supervisor tenure were coded as follows: 1 = < 6 months; 2 = 6 months to < 1 year; 3 = 1 year to < 3 years; 4 = 3 years to < 5 years; 5 = 5 years to < 10 years; and 6 = 10 years or more.

Code of conduct is related to the policy and culture of the organizations. The organizations were coded as follows: 1 = organizations that have their own code of conduct or use the industry code of conduct; and 2 = organizations that do not have their own code of conduct or do not use the industry code of conduct.

3.3 Pilot Study

The pilot study aimed to achieve the following. First, it sought to test the additional items from the extended-ELS, which encompasses the 10 items from the ELS by Brown et al. (2005) and an additional three items related to ethical decision making from previous qualitative research (Anoma Charoensap et al., 2015) and Rest's four

component of ethical decision making (Rest, 1986, pp. 3–18). Second, it sought to test and validate all study variables measured in the Thai context. The pilot study was performed with 100 MBA students (weekend program) at the National Institute of Development Administration (NIDA), Thailand.

To explore the number of factors and quality of the extended-ELS items, EFA was employed to explore the number of components and factor loading of each item. The results showed that one primary factor accounted for 55.98% of the total variance explained (see Appendix C.1). Factor loading was ranked from 0.53 to 0.88 (see Appendix C.2). The additional items showed a high factor loading (0.84 to 0.86). Following this, a t-test of difference was performed to ensure no items were redundant. The results of the t-test showed the items had power of difference with statistical significance (see Appendix C.3).

A reliability test was performed for each measurement using the Statistical Package for Social Sciences (SPSS) version 22 software for Windows 2010. Reliability was assessed via the Cronbach's alpha for the items of each variable. The Cronbach's alpha needs to exceed 0.7 in all variables, indicating that the reliability will be at least an acceptable level of internal consistency. All measurements demonstrated good reliability, ranging from 0.77 to 0.95, except for job satisfaction. The result of internal consistency for job satisfaction was shown as fair, with a Cronbach's alpha of 0.69. However, after deleting one item, the internal consistency was improved, with a Cronbach's alpha of 0.873. The deleted item was: "each day at work seems like it never end," which was reverse coded. After consulting with experts, the agreement among the research committee to delete this item for the data analysis. Table 3.11 presents a description of the variable measurements, including the reliability (Cronbach's alpha), mean, and standard deviation calculated across the 100 respondents in the pilot test sample.

Table 3.11 Reliability Test of All Study Measurement Tools (*n* = 100)

Measurement	M	SD	Cronbach's Alpha
ELS	3.71	0.67	0.93
Extended-ELS	3.72	0.69	0.95
Affective commitment to organization	3.59	0.68	0.77
Affective commitment to supervisor	3.73	0.72	0.86
Job satisfaction (after deleting 1 item)	3.59	0.79	0.87
Interpersonal justice	3.84	0.71	0.83
Informational justice	3.64	0.79	0.91

Note: M = mean; SD = standard deviation.

To validate the measurement, we performed a correlation test and multiple regression analysis. The results showed that the extended-ELS predicted all study employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction. The correlation among each variable was good (see Appendix C.4).

3.4 Sample

This study aimed to investigate the effect of ethical leadership and interactional justice in a business context. The sampling strategy was purposive sampling, targeting a particular group of sample members (Passmore & Baker, 2005, pp. 51–52). The target participants were full-time employees who extended their education to an MBA in 2016 at the top four universities in Bangkok, Thailand. The study selected employees who attended an MBA because most students work in the business sector in various industries, which was the purpose of this study. A letter asking for approval to conduct the research was sent to four universities: NIDA, Chulalongkorn University, Thammasat University, and Kasetsat University. The total number of MBA students for 2016 at the four universities was 2,255 students (see Table 3.12).

Table 3.12 Sample Frame for the Research

University	Number of Students in 2016
NIDA	1,064
Chulalongkorn	832
Thammasart	153
Kasetsart	206
Total	2,255

In response to Biner and Kidd's (1994) suggestion to use incentive to encourage participants to respond to questionnaires, a stationary set was provided to each participant who returned the questionnaire. One thousand questionnaires were returned, with a response rate of 44.34%. Data screening was performed using a statistical descriptive analysis and a manual check of the demographics of the sample and their managers to ensure there was one participant rating per supervisor. Questionnaires with missing data or suspected same supervisor of each participant were excluded. Finally, 862 participants were enrolled in the data analysis.

Among the 862 participants, there were 349 males and 513 females. The majority of participants were in the age range of 23 to 33 years, with 80.7% of the total from various industries. The industries were categorized into nine categories that aligned with the industry categories arranged on the stock exchange trading in Thailand. The first category was "agriculture and food," which comprised the agriculture and food and beverage industries. The second category was "consumer products," which comprised fashion, home, and office; personal products; and pharmaceutical industries. The third category was "financial," which comprised the banking, finance and securities, and insurance industries. The fourth category was "industrial," which comprised the automotive and industrial materials and machine industries. The fifth category was "property and construction," which comprised the construction materials, construction services, property development, and property fund and real estate investment industries. The sixth category was "resources," which comprised the energy and utilities and mining industries. The seventh category was "services," which comprised the commerce, healthcare services, media and publishing, professional

services, tourism and leisure, and transportation and logistics industries. The eighth category was “technology,” which comprised the electronic components and information and communication technology industries. Finally, an “other” category was included. The participants were from the following industries:

1) agriculture and food: 10.1%
2) consumer products: 12.6%
3) financial: 13.3%
4) industrial: 18.3%
5) property and construction: 7.9%
6) resources: 10.1%
7) services: 13.5%
8) technology: 11.5%
9) other: 2.7%.

In regard to organizational tenure, the participants had worked for their current organization for the following periods: 9.0% for up to one year, 29.2% for one to three years, 28.8% for three to five years, 22.3% for five to 10 years, and 10.7% for more than 10 years. In regard to supervisor tenure, the participants had worked with their current supervisors for the following timeframes: 26.7% for up to one year, 40.1% for one to three years, 18.9% for three to five years, 10.1% for five to 10 years, and 4.2% for more than 10 years. Table 3.13 summarizes the participants’ features.

Table 3.13 Demographic Features of Participants (*n* = 862)

Variable	Frequency	Percentage
Sex		
Male	349	40.5%
Female	513	59.5%
Age		
23–33 years	696	80.8%
34–44 years	133	15.4%
45–55 years	33	3.8%
Position		
Employee	498	57.8%
First-line manager	178	20.6%
Middle management	132	15.3%
Senior management or executive level	54	6.3%
Business sector		
Agriculture and food industry	87	10.1%
Consumer products	87	10.1%
Financial	137	15.9%
Industrial	158	18.3%
Property and construction	68	7.9%
Resources	87	10.1%
Services	116	13.5%
Technology	99	11.5%
Other	23	2.7%
Organization tenure		
Less than six months	29	3.4%
Six months to one year	50	5.8%
One to three years	252	29.2%
Three to five years	248	28.8%
Five to 10 years	191	22.2%
More than 10 years	92	10.7%
Supervisor tenure		
Less than six months	94	10.9%
Six months to one year	136	15.8%
One to three years	346	40.1%
Three to five years	163	18.9%
Five to 10 years	87	10.1%
More than 10 years	36	4.2%

The participants' managers were 60.2% male and 29.8% female. Their organizational tenure was as follows: less than six months = 10.9%, six months to one

year = 15.8%, one to three years = 40.1%, three to five years = 18.9%, five to 10 years = 10.1, and more than 10 years = 4.2%. The manager levels were as follows: 39.1% executive or senior level, 31.3% middle management, and 29.6% first-line management. Organizations with codes of conduct comprised 85% of the total. Table 3.14 summarizes the demographic data of the participants' supervisors and organizations.

Table 3.14 Demographic Features of Participants' Supervisors (*n* = 862)

Variable	Frequency	Percentage
Sex		
Male	519	60.2
Female	343	39.8
Position		
First-line manager	255	29.6
Middle management	270	31.3
Senior management or executive level	337	39.1
Span of control		
Less than five employees	309	35.8
Five to seven employees	162	18.1
Eight to 10 employees	103	11.9
More than 10 employees	288	33.4
Organization		
Has code of conduct	724	84.0
Has no code of conduct	138	16.0

3.5 Data Analysis

Structural equation modeling (SEM) is a statistical technique allowing researchers to examine a wide variety of hypotheses and correspondence for residual or error terms that are associated with the observed variables (Kline, 2011). SEM was selected here to test the hypotheses using the LISREL 8.72 package (Jöreskog & Sörbom, 2005). First, before testing the hypotheses, EFA was conducted to test common method bias by applying Harman's single factor test, as suggested by Podsakoff et al. (2003), and to test the provisional correctness of the number of factors

in the hypothesized model (Hayduk & Glaser, 2000). Second, confirmatory factor analysis (CFA) was employed to test the measurement model. If the fit of the CFA model is acceptable, the analysis can advance to testing the hypothesized structural regression (SR) model; otherwise, the measurement model must be revised. Following this, the hypothesized SR model was estimated with the same set of measurement models. The following section details each step of the process of testing the hypotheses and criteria to estimate the model fit.

3.5.1 Exploratory Factor Analysis

In this study, EFA was conducted to test common method bias and construct validity by using SPSS version 22. Testing common method bias is necessary before testing the study hypotheses (Sharma, Yetton, & Crawford, 2009), particularly for quantitative studies using self-report and a cross-sectional design (Podsakoff et al., 2003). Common method bias is a potential validity and generalizability threat for the research results and can lead to misinterpretations.

This research applied Harman's single factor test on the data (Podsakoff et al., 2003) and examined the number of factors necessary to account for the variance in the variables. The basic assumption of this technique is that if a substantial amount of common method variance is present, a single factor will emerge from the factor analysis, or one general factor will account for the majority of covariance among the measures.

Apart from using EFA for statistical remedies to examine common method bias, EFA was also used to examine the construct validity for the study data. If six factors of the hypotheses SR model—ethical leadership, informational justice, interpersonal justice, affective organizational commitment, affective commitment to the supervisor, and job satisfaction—were extracted, the accuracy of the number of factors in the hypothesized model was specified (Hayduk & Glaser, 2000).

EFA was processed by loading all 38 items for the six variables in the study, using maximum likelihood method for factor extraction. Principal axis factoring was selected with an oblique rotation (direct oblimin), allowing for correlations among the factors, in order to explore number of factors. The Kaiser-Meyer-Olkin (KMO) value

needs to be greater than 0.6 (Kaiser, 1974), while the Bartlett's test of sphericity needs to be statistically significant with a *p*-value of less than 0.05 (Bartlett, 1954).

3.5.2 Confirmatory Factor Analysis

CFA was conducted to test how well the actual data conformed to the measurement model. CFA indicates the relationship among the observed variables (the items of the questionnaire) underlying the latent variables. A correlation matrix of the items for each measurement was loaded through the program syntax for analysis using model estimation through maximum likelihood. A correlation matrix of all 38 items from six measurements was then loaded to confirm the factors in the model by using the same model estimation. Some items were identical across measurements; thus, the error terms for these items were likely to be correlated, so the estimated error terms for these items were allowed to freely co-vary, which suggested non-zero correlations between each individual error of all the factors (Kline, 2011). The details of the goodness-of-fit indices were as described in Section 3.5.4 and indicated in Table 3.15.

3.5.3 Hypothesized SR Motel Testing

This analysis began by drawing a hypothesized model using the CFA measurement model, as depicted in Figure 3.2. In this figure, ethical leadership, informational justice, interpersonal justice, affective organizational commitment, affective commitment to the supervisor, and job satisfaction are presented in an ellipse-shaped object that represents the latent variables. The items (indicators) of latent variables are represented in rectangles. The relationships between the latent variables and indicators are represented by a one-way arrow (→). A line with a one-way arrow between two latent variables indicates the influence of one variable on the other: ethical leadership → informational justice; ethical leadership → interpersonal justice; informational justice → affective organizational commitment; informational justice → affective commitment to the supervisor; informational justice → job satisfaction; interpersonal justice → affective organizational commitment; interpersonal justice → affective commitment to the supervisor; and interpersonal justice → job satisfaction. The effect size of the paths was determined by standardized path coefficient, which

measured the effect of one variable on the other variables. The significance of the standardized path coefficient was determined by a t-value when it was greater than 1.96 (Kline, 2011).

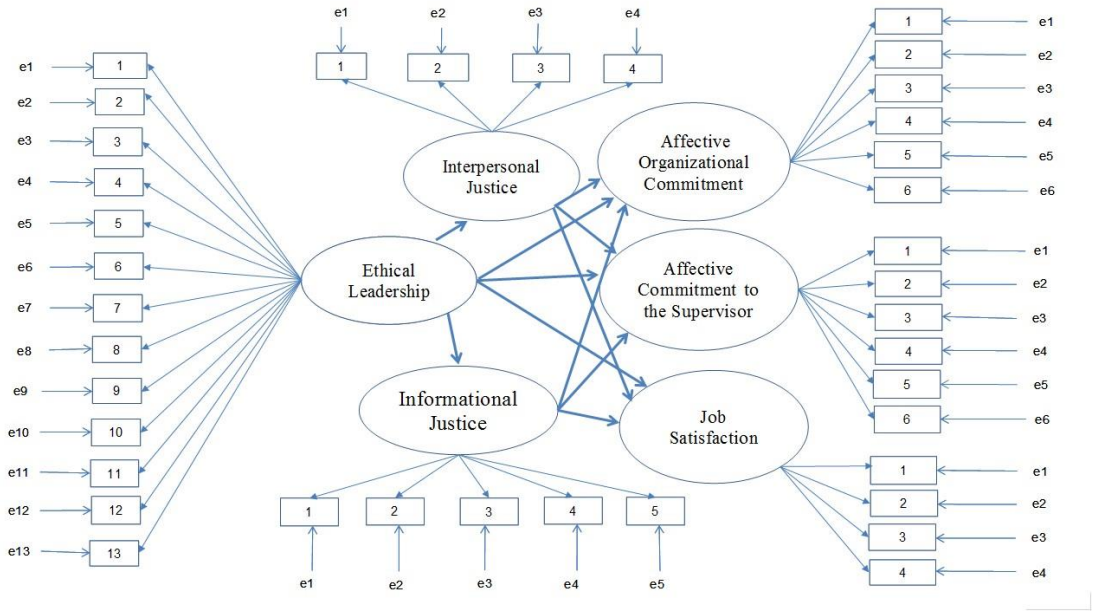

Figure 3.2 Hypothesized Model

3.5.4 Goodness-of-Fit Indices

To estimate a model fit, this study was selected well-established and widely used indices: a χ^2 test of fit statistic and approximate fit indices. According to Kline (2011), four approximate fit indices have been widely reported in the SEM literature: the Steiger–Lind root mean square error of approximation (RMSEA), Jöreskog–Sörbom goodness-of-fit index (GFI) and absolute goodness-of-fit index (AGFI), Bentler comparative fit index (CFI), and standardized root mean square residual (SRMR).

To demonstrate model fit, the χ^2 value should not be significant ($p > 0.05$); RMSEA should be less than 0.05 (indicating a "good fit"); and GFI and AGFI should generally be 0 to 1.0, where 1.0 indicates the best fit. The combination of a CFI and SRMR threshold for concluding "acceptable fit" is based on CFI being ≥ 0.95 and SRMR ≤ 0.08. A factor loading value of any item of less than 0.4 is considered

unacceptable (Deng, 2010). Table 3.15 provides information on the fit indices and fit criteria used in the study.

Table 3.15 Goodness-of-Fit Indices

Fit Indices	Fit Criteria	References
$\chi 2$	$p > 0.05$	Kline (2011)
RMSEA	< 0.50 good	Browne and Cudeck (1992)
	0.05 to 0.08 reasonable	
	0.08 to 0.1 tolerable	
GFI	≥ 0.90	Joreskog and Sorbom (1982)
AGFI	≥ 0.90	Tanaka and Huba (1985)
CFI	≥ 0.95	Bentler (1990)
SRMR	≤ 0.08	Hu and Bentler (1999)
Loading value	> 0.40	Deng (2010)

3.6 Chapter Summary

This chapter began by discussing the study's conceptual framework, and then determined the hypotheses to answer the research questions. The original questionnaire included 39 items—13 items for ELS, six items for affective organizational commitment scales, six items for affective commitment to the supervisor, five items for job satisfaction, four items for interpersonal justice, and five items for informational justice—with a five-point Likert scale.

A pilot test was performed that aimed to develop and validate the measurement—particularly the new measurement to assess ethical leadership. The results indicated that the extended-ELS had high internal consistency, with a Cronbach's alpha = 0.95. All variable measurements showed good reliability, except job satisfaction. However, after excluding one item, the reliability was good. The validity test showed that ethical leadership can predict employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job

satisfaction. Further, all variables had good correlation. The pilot test demonstrated good measurement and supported the research framework to test the hypotheses.

The sample frame of this study was designed to capture employees from various organizations in Thailand. Therefore, the target participants were full-time employees who extended their education to MBA in the top four universities. The process of data screening was conducted to ensure one participant rating per one supervisor. In addition, questionnaires with data missing or suspected same supervisor were excluded. In total, there were 862 participants included for data analysis.

SEM was selected for data analysis because it has the ability to examine a wide variety of hypotheses and correspondence to residual or error terms that are associated with the observed variables (Kline, 2011). Before testing the hypotheses, EFA and CFA were performed. EFA was aimed to test common method bias by applying Harman's single factor test, as suggested by Podsakoff et al. (2003), and test the provisional correctness of the number of factors in the hypothesized model (Hayduk & Glaser, 2000). CFA was aimed to test the measurement model. Then the hypothesized SR model with the same set of measurement models was used for data analysis. The results are presented in Chapter 4.

CHAPTER 4

RESEARCH FINDINGS

This chapter presents the research findings from testing the hypotheses on the effect of ethical leadership on employee work attitudes, and the mediating roles of informational and interpersonal justice. As discussed in Chapter 3, SEM was selected for hypotheses testing. However, before testing the hypothesized SR model, EFA and CFA were undertaken. This chapter discusses the results of the EFA, CFA, and hypotheses testing.

4.1 Exploratory Factor Analysis Results

EFA (principal axis factoring) was employed with an oblique rotation (direct oblimin), allowing for correlations among factors. According to KMO, the measure must be considered to have a value greater than 0.5, while Bartlett's test of sphericity needs to be statistically significant, which indicates an adequate sample size. The results showed a KMO value of 0.94 and Bartlett's test of sphericity *p*-value of 0.00. Thus, the results indicated satisfactory values that meant factor analysis could be performed.

The EFA indicated that six primary factors accounted for 55.50% of the variance. The findings indicated six factors that were the same as the original hypothesized model, and the results did not indicate common method bias (Podsakoff et al., 2003). Therefore, the first step passed the criteria. Table 4.1 presents the factor extraction.

Table 4.1 Exploratory Factor Analysis Results (*n* = 862)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings [a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.781	41.529	41.529	15.379	40.47	40.47	12.808
2	2.935	7.724	49.253	2.492	6.558	47.028	6.104
3	1.515	3.986	53.239	1.11	2.921	49.95	8.808
4	1.256	3.304	56.543	0.796	2.094	52.043	6.409
5	1.172	3.085	59.628	0.699	1.841	53.884	10.16
6	1.024	2.695	62.323	0.612	1.612	55.496	7.39
7	0.92	2.422	64.745				
8	0.828	2.178	66.923				
9	0.809	2.129	69.052				
10	0.777	2.044	71.096				
11	0.71	1.87	72.965				
12	0.696	1.833	74.798				
13	0.61	1.605	76.403				
14	0.583	1.534	77.937				
15	0.54	1.422	79.359				
16	0.53	1.395	80.755				
17	0.511	1.346	82.101				
18	0.486	1.279	83.38				
19	0.472	1.243	84.622				
20	0.45	1.185	85.807				
21	0.44	1.158	86.965				
22	0.427	1.123	88.088				
23	0.42	1.104	89.192				
24	0.384	1.012	90.204				
25	0.374	0.983	91.187				
26	0.345	0.907	92.094				
27	0.335	0.882	92.976				
28	0.324	0.854	93.83				
29	0.298	0.784	94.614				
30	0.287	0.755	95.369				
31	0.266	0.699	96.069				

Table 4.1 (Continued)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings [a]
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
32	0.251	0.661	96.733				
33	0.241	0.633	97.363				
35	0.22	0.578	98.564				
36	0.218	0.574	99.137				
37	0.192	0.504	99.642				
38	0.136	0.358	100				

Note: [a] = Rotation converged in 12 iterations.

4.2 Confirmatory Factor Analysis Results

The series of CFA using the LISREL 8.72 package (Joreskog & Sorbom, 2005) were performed to confirm the measurement model before testing hypotheses. All six measurements were then loaded together to confirm the factors of the model by using the same model estimation (see Chapter 3). To estimate model fit, a χ^2 test of fit statistic and approximate fit indices were used (see Table 3.12). The CFA factor loadings of each items were acceptable if CFA factor loadings > 0.5 (Field, 2005; Thomson, 2004). The following sections summarize the CFA results for the model fit and factor loadings of each measurement, and the CFA results for the model fit of all measurements (six-factor model).

4.2.1 CFA for Extended-ELS

Figure 4.1 presents the CFA model of the 13 items of the extended-ELS. The CFA results demonstrated model fit with a χ^2 value of 27.81 and degree-of-freedom value of 37 (p = 0.86). Further, the approximate fit indices were evaluated. It can be seen that the CFA extended-ELS model provided a good fit to the data (GFI = 1, AGFI

= 0.99, CFI = 1, SRMR = 0.01, and RMSEA = 0.00). Table 4.2 provides a summary of the CFA model of the extended-ELS.

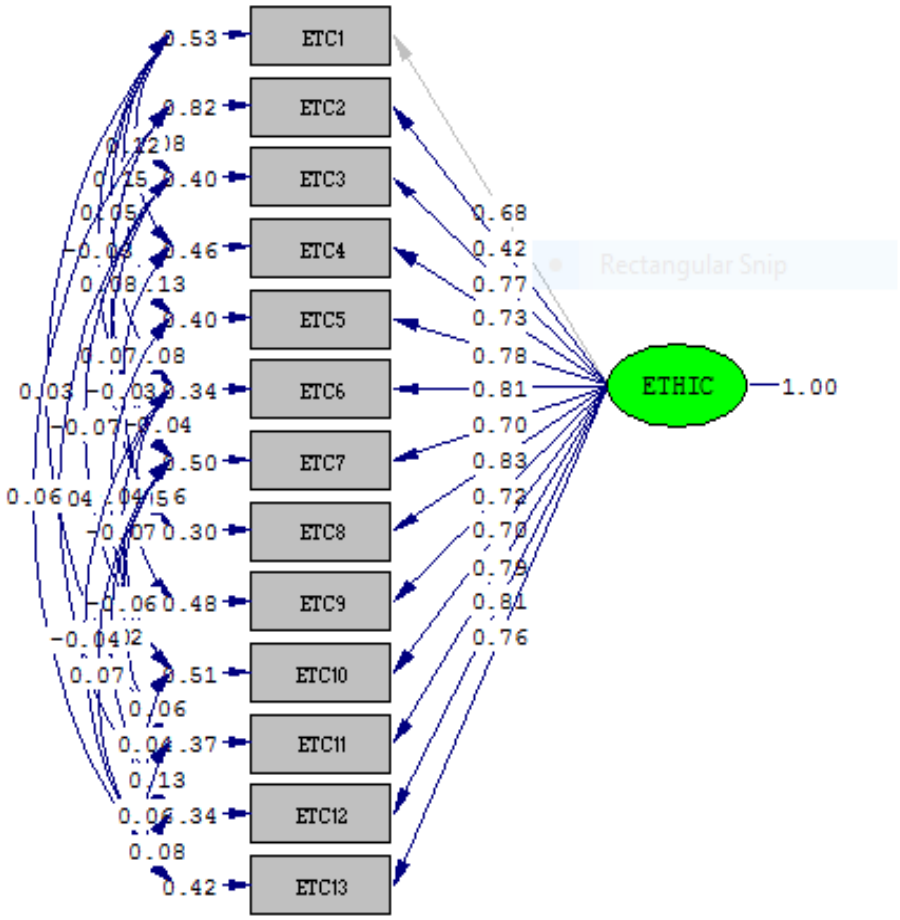

Figure 4.1 Ethical Leadership Measurement Model

Note: ETC1 to ETC13 = ethical leadership items 1 to 13.

Table 4.2 CFA Results of Ethical Leadership Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	27.81	Acceptable (df = 37, p = 0.86)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.01	Good

The results for the factor loadings of each item of the extended-ELS were acceptable with CFA factor loadings > 0.5 (Field, 2005; Thomson, 2004). Only one item from ethical leadership—"My supervisor disciplines employees who violate ethical standards"—had a CFA factor loading value of 0.42. Although the factor loadings should be higher than 0.50, they are acceptable if the reliability is higher than 0.60 because the convergent validity of the construct remains adequate (Fornell & Larcker, 1981). The Cronbach's alpha values of the 13 items from the extended-ELS exceeded 0.70, as presented in Table 4.15. Another reason to retain this item for data analysis was because, according to the definition of ethical leadership by Brown et al. (2005), this item is considered a transactional component, which is one element of ethical leadership. Therefore, all items were included to test the model. Table 4.3 provides a summary of the standardized CFA factor loadings for ethical leadership.

Table 4.3 Standardized CFA Factor Loading of Extended-ELS

No.	Items	Factor Loading
1	My supervisor listens to what employees have to say	0.68
2	My supervisor disciplines employees who violate ethical standards	0.42
3	My supervisor conducts his/her personal life in an ethical manner	0.77
4	My supervisor has the best interests of employees in mind	0.73
5	My supervisor makes fair and balanced decisions	0.78
6	My supervisor can be trusted	0.81
7	My supervisor discusses business ethics or values with employees	0.70
8	My supervisor sets an example of how to do things the right way in terms of ethics	0.83
9	My supervisor defines success not just by results but also the way that they are obtained	0.72
10	When making decisions, my supervisor asks, “what is the right thing to do?”	0.70
11	My supervisor is willing to do the right things and is responsible for the results	0.79
12	My supervisor participates in actions and overcomes obstacles in order to meet ethical standards	0.81
13	My supervisor appreciates and recognizes employees who behave in ethical manner	0.76

Note: All measurements in the study were distributed to participants in the Thai version. Items 1 to 10 were adapted from Brown et al. (2005), while items 11 to 13 were adapted from Charoensap (2015).

4.2.2 CFA for Affective Organizational Commitment Scales

Figure 4.2 is a CFA model of six items of affective organizational commitment. The CFA results demonstrated model fit, with a χ^2 value of 5.16 and degree-of-freedom value of 5 (p = 0.40). Further, the approximate fit indices were evaluated. It can be seen that the CFA extended-ELS model provided a good fit to the data (GFI = 1, AGFI =

0.99, CFI = 1, SRMR = 0.01, and RMSEA = 0.01). Table 4.4 presents a summary of the CFA results of the affective organizational commitment measurement model.

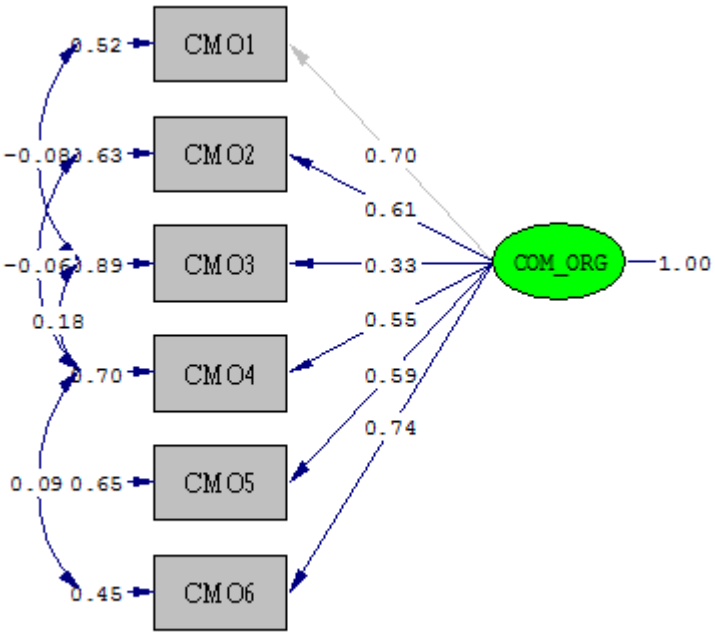

Figure 4.2 Affective Organizational Commitment Model

Note: CMO1 to CMO6 are affective organizational commitment items 1 to 6.

Table 4.4 CFA Results of Affective Organizational Commitment Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	5.16	Acceptable (df = 5, p = 0.40)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.01	Good

Five of the six items of the affective organizational commitment scales had factor loadings of more than 0.5. One item—"I do not feel like 'part of the family' at my organization"—had a factor loading of 0.33. This item was a reversed question and was recoded before data analysis. This item was not removed for data analysis because the measurement model fit with the data in both the χ^2 value and approximate fit indices, and, if the item was removed, this might have changed the definition by Meyer et al. (1993). Moreover, a factor loading of less than 0.50 is acceptable if the reliability is higher than 0.60 (Fornell & Larcker, 1981). The Cronbach's alpha values of the 13-item extended-ELS exceeded 0.70, as presented in Table 4.15. Table 4.5 presents a summary of the standardized factor loading.

Table 4.5 Standardized CFA Factor Loading of Affective Organizational Commitment Scales

Affective Commitment to Organization Items	Factor Loading
1. I would be very happy to spend the rest of my career with this organization	0.70
2. I really feel as if this organization's problems are my own	0.61
3. I do not feel like "part of the family" at my organization (R)	0.33
4. I do not feel "emotionally attached" to this organization (R)	0.55
5. This organization has a great deal of personal meaning for me	0.59
6. I do not feel a strong sense of belonging to my organization (R)	0.74

Note: All measurements in the study were distributed to participants in the Thai version. Affective organizational commitment was adapted from Meyer at al. (1993). R = reversed questions that were recoded before data analysis.

4.2.3 CFA for Affective Commitment to the Supervisor

Figure 4.3 presents the CFA model comprising six items of affective commitment to the supervisor. The CFA results demonstrated model fit with a χ^2 of 8.80 and degree-of-freedom value of 5 (p = 0.12). Further, the approximate fit indices

were evaluated. It can be seen that the CFA of affective commitment to the supervisor model provided a good fit to the data (GFI = 1, AGFI = 0.99, CFI = 1, SRMR = 0.01, RMSEA = 0.03). Table 4.6 provides a summary of the CFA results of affective commitment to the supervisor measurement model.

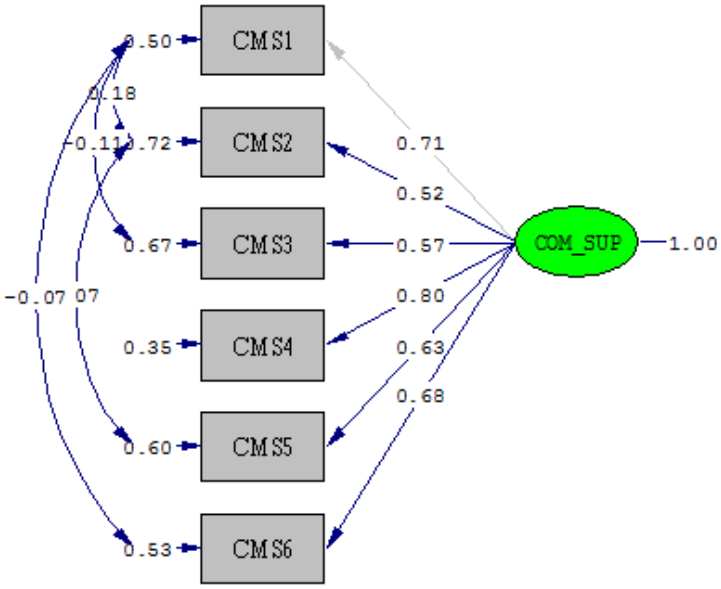

Figure 4.3 Affective Commitment to the Supervisor Model

Note: CMS1 to CMS 6 are affective commitment to the supervisor items 1 to 6.

Table 4.6 CFA Results of Affective Commitment to the Supervisor Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	8.80	Acceptable (*df* = 5, *p* = 0.12)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.03	Good

All six items of affective commitment to the supervisor had a factor loading range from 0.52 to 0.80. The item "I do not feel 'emotionally attached' to my supervisor" was a reverse question that was recoded before data analysis, and

demonstrated a high factor loading of 0.80. The item "I really feel as if my supervisor's problems are my own" had the lowest factor loading of 0.52. Table 4.7 presents the factor loading of all items of affective commitment to the supervisor scales.

Table 4.7 Standardized CFA Factor Loading of Affective Commitment to the Supervisor Scales

Affective Commitment to the Supervisor Items	Factor Loading
1. I would be very happy to spend the rest of my career with this supervisor	0.71
2. I really feel as if my supervisor's problems are my own	0.52
3. I do not feel like "part of the team" (R)	0.57
4. I do not feel "emotionally attached" to my supervisor (R)	0.80
5. My supervisor has a great deal of personal meaning for me	0.63
6. I do not feel a strong sense of belonging to my supervisor (R)	0.68

Note: All measurements in the study were distributed to participants in the Thai version. Affective commitment to the supervisor was adapted from Meyer et al. (1993). R = reversed questions that were recoded before data analysis.

4.2.4 CFA for Job Satisfaction Scales

Figure 4.4 presents the CFA model of four items of job satisfaction scales. The CFA results demonstrated model fit with a χ^2 value of 2.11 and degree-of-freedom value of 1 ($p = 0.15$). Further, the approximate fit indices were evaluated. It can be seen that the CFA extended-ELS model provided a good fit to the data (GFI = 1, AGFI = 0.99, CFI = 1, SRMR = 0.01, RMSEA = 0.04). Table 4.8 presents the results of the CFA of the satisfaction measurement model.

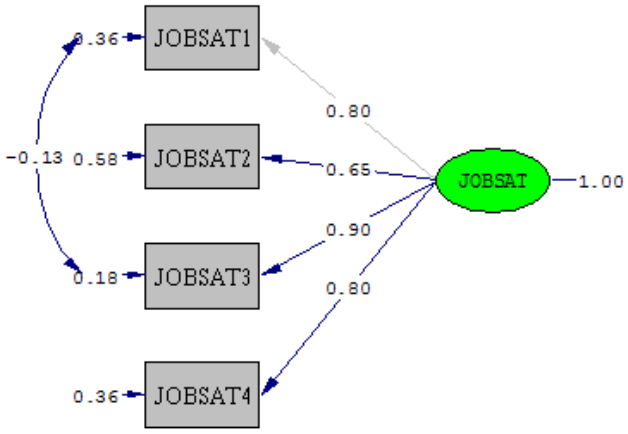

Figure 4.4 Job Satisfaction Model

Note: JOBSAT1 to JOBSAT4 are job satisfaction items 1 to 4.

Table 4.8 CFA Results of Job Satisfaction Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	2.11	Acceptable (df = 1, p = 0.15)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.04	Good

The factor loadings of the five items were between 0.65 and 0.90. The item with the highest factor loading was: “I find real enjoyment in my work.” The item with the lowest factor loading was: “Most days I am enthusiastic about my work.” Table 4.9 presents the factor loading of all items of the job satisfaction scales.

Table 4.9 Standardized CFA Factor Loading of Job Satisfaction Scales

Job Satisfaction on Items	Factor Loading
1. I feel fairly satisfied with my present job	0.80
2. Most days I am enthusiastic about my work	0.65
3. I find real enjoyment in my work	0.90
4. I consider my job to be rather unpleasant (R)	0.80

Note: All measurements in the study were distributed to participants in the Thai version. The job satisfaction measurement was adapted from Brayfield and Rothe (1951). R = reversed question that was recoded before data analysis.

4.2.5 CFA of Informational Justice Scales

Figure 4.5 presents the CFA model with five items of the informational justice scales. The CFA results demonstrated model fit with a χ^2 value of 4.56 and degree-of-freedom value of 3 (p = 0.21). Further, the approximate fit indices were evaluated. It can be seen that the CFA extended-ELS model provided a good fit to the data (GFI = 1, AGFI = 0.99, CFI = 1, SRMR = 0.01, RMSEA = 0.03). Table 4.10 presents the CFA of the informational justice measurement model.

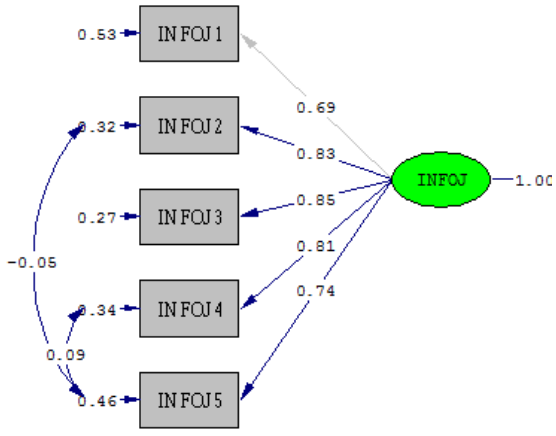

Figure 4.5 Informational Justice Measurement Model

Note: INFOJ 1 to INFOJ5 are informational justice items 1 to 5.

Table 4.10 CFA Results of Informational Justice Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	4.56	Acceptable (df = 3, p = 0.21)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.03	Good

The factor loadings of the five items of informational justice were between 0.69 and 0.85. The item with the highest factor loading was: “My supervisor has explained regarding the procedure reasonable.” The item with the lowest factor loading was: “My supervisor has been candid in (his/her) communications with me.” Table 4.11 presents the factor loading of all items of the informational justice scales.

Table 4.11 Standardized CFA Factor Loading of Informational Justice Scales

Informational Justice Items	Factor Loading
1. My supervisor has been candid in (his/her) communications with me	0.69
2. My supervisor has explained the procedures thoroughly	0.83
3. My supervisor has explained regarding the procedure reasonable	0.85
4. My supervisor has communicated detail in a timely manner	0.81
5. My supervisor seems to tailor (his/her) communications to individual’s specific needs	0.74

Note: All measurements in the study were distributed to participants in the Thai version. The informational justice measurement was adapted from Colquitt (2001).

4.2.6 CFA of Interpersonal Justice Scales

Figure 4.6 presents the CFA model of the five items of the interpersonal justice scales. The CFA results demonstrated model fit with a χ^2 value of 1.1 and degree-of-freedom value of 1 (p = 0.29). Further, the approximate fit indices were evaluated. It can be seen that the CFA extended-ELS model provided a good fit to the data (GFI = 1, AGFI = 0.99, CFI = 1, SRMR = 0.01, RMSEA = 0.01). Table 4.12 presents a summary of the CFA model of interpersonal justice.

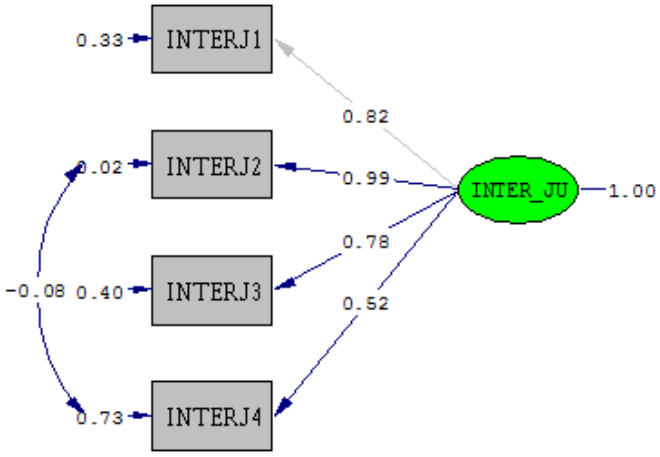

Figure 4.6 Interpersonal Justice Measurement Model

Note: INTERJ 1 to INTERJ4 are interpersonal justice items 1 to 4.

Table 4.12 CFA Results of Interpersonal Justice Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	1.10	Acceptable (df = 1, p = 0.29)
GFI	1.00	Acceptable
AGFI	0.99	Acceptable
CFI	1.00	Acceptable
SRMR	0.01	Acceptable
RMSEA	0.01	Good

The factor loadings of the four items of interpersonal justice were between 0.52 and 0.99. The item “My supervisor has treated me with dignity” had a very high factor loading of 0.99. The item “My supervisor has treated me refrained from improper remarks or comments” had the lowest factor loading. Table 4.13 presents the factor loading of all items of the interpersonal justice scales.

Table 4.13 Standardized CFA Factor Loading of Interpersonal Justice

Interpersonal Justice Items	Factor Loading
1. My supervisor has treated me in a polite manner	0.82
2. My supervisor has treated me with dignity	0.99
3. My supervisor has treated me with respect	0.78
4. My supervisor has treated me refrained from improper remarks or comments	0.52

Note: All measurements in the study were distributed to participants in Thai version. Interpersonal measurements was adapted from Colquitt (2001).

4.2.7 CFA of Six-factor Model

CFA for the entire hypothesized model was performed to determine how well the proposed model fit the sample data. A correlation matrix of the hypothesized six-factor model with 38 items was loaded for data analysis. The results demonstrated model fit with the observed data, with a χ^2 value of 27.81 and degree-of-freedom value of 37 (p = 0.86). Further, the approximate fit indices were evaluated. It can be seen that the CFA of the six-factor model provided a good fit to the observed data (GFI = 0.98, AGFI = 0.96, CFI = 1, SRMR = 0.01, RMSEA = 0.00). Table 4.14 provides a summary of the results of the CFA of the six-factor measurement model.

Table 4.14 CFA Results of Measurement Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	374.55	Acceptable (df = 375, p = 0.35)
GFI	0.98	Acceptable
AGFI	0.96	Acceptable
CFI	1.00	Acceptable
SRMR	0.02	Acceptable
RMSEA	0.00	Good

In order to assess the strength of the relationship among the variables, Pearson correlation analysis was conducted. The strongest relationship was between ethical leadership and informational justice (r = 0.8), while the weakest relationship was between affective organizational commitment and interpersonal justice (r = 0.31). All relationship among the study variables–ethical leadership, two mediators and the outcomes – illustrated significant inter-correlations (p < 0.01).Thus, the measurement had a good degree of predictive validity.

Internal reliabilities for all the variables were performed—interpersonal justice, informational justice, affective commitment to the organization, affective commitment to the supervisor, job satisfaction, and ethical leadership—showed good reliability, with a Cronbach's alpha coefficient level of 0.76 to 0.94. Thus, the measurements were reliable. Table 4.15 presents the inter-correlations among the variables, as well as information on scale reliability (Cronbach's alpha).

Table 4.15 Correlations among Variables (n = 862) and Reliability Coefficient

	M	SD	1	2	3	4	5	6	Cronbach's Alpha
Interpersonal justice	3.82	0.70	1						0.82
Informational justice	3.54	0.84	0.63	1					0.89
CMO	3.46	0.69	0.31	0.41	1				0.76
CMS	3.61	0.75	0.55	0.69	0.63	1			0.82
Job satisfaction	3.65	0.77	0.33	0.47	0.62	0.59	1		0.86
Ethical leadership	3.66	0.70	0.66	0.80	0.48	0.73	0.52	1	0.94

Note: Reliability is indicated by Cronbach's alpha. All correlations were significant at $p < 0.01$. M = mean; SD = standard deviation; CMO = affective organizational commitment; CMS = affective commitment to the supervisor.

4.3 Results of Hypotheses Testing

To test the direct effect of ethical leadership (Research Question 1) and the mediating role of informational and interpersonal justice (Research Question 2), SEM was used to test the hypothesized model. With respect to the CFA measurement model, this study included the paths (straight arrow:→) from ethical leadership to each employee work attitude (affective organizational commitment, affective commitment to the supervisor, and job satisfaction) and the mediators (informational and interpersonal justice) to employee work attitudes: from informational justice to each employee work attitudes, and from interpersonal justice to each employee work attitude.

Some items were identical across measurements; thus, the error terms for these items were likely to be correlated, so the estimated error terms for these items were allowed to freely co-vary, which suggested non-zero correlations between each individual error of all the factors (Kline, 2011). Although all employee work attitudes had inter-correlations, and both informational justice and interpersonal justice had inter-correlation, these paths were constrained because they were outside the scope of

this study. The study used the χ^2 test of the fit statistic and approximate fit indices to estimate the overall fit of the model.

The hypothesized model (Model A: partially mediated model) demonstrated statistically significant model fit with χ^2 of 412.165 (df = 370, p = 0.064). Moreover, all approximate fit indices indicated model fit with the observed data (GFI = 0.976, AGFI = 0.952, RMSEA = 0.010, CFI =1, SRMR = 0.019). Table 4.16 presents a summary of the results of the χ^2 test and approximate fit indices.

Table 4.16 Results of Hypotheses Model Testing: Partially Mediated Model

Model Fit Indices	Results of Model Fit	Assessment of Model Fit
Chi square	412.17	Acceptable (df = 370, p = 0.06)
GFI	0.98	Acceptable
AGFI	0.95	Acceptable
CFI	1.00	Acceptable
SRMR	0.02	Acceptable
RMSEA	0.01	Good

Ethical leadership demonstrated a statistically significant positive direct effect on affective organizational commitment (β = 0.59, p < 0.01), affective commitment to the supervisor (β = 0.34, p < 0.01), and employee job satisfaction (β = 0.42, p < 0.01). The results supported Hypotheses 1a, 1b, and 1c. The finding of an indirect effect of ethical leadership via the two types of interactional justice demonstrated that interpersonal justice had no statistically significant effect on any of the attitudes, whereas informational justice had a statistically significant positive effect on affective commitment to the supervisor (β = 0.58, p < 0.01) and job satisfaction (β = 0.27, p < 0.05), yet no mediating role on affective organizational commitment. Thus, informational justice was seen to partially mediate the effects of ethical leadership on affective commitment to the supervisor and job satisfaction. These results supported Hypotheses 2b and 2c. Figure 4.7 demonstrates the coefficient paths for the ethical leadership model in this study.

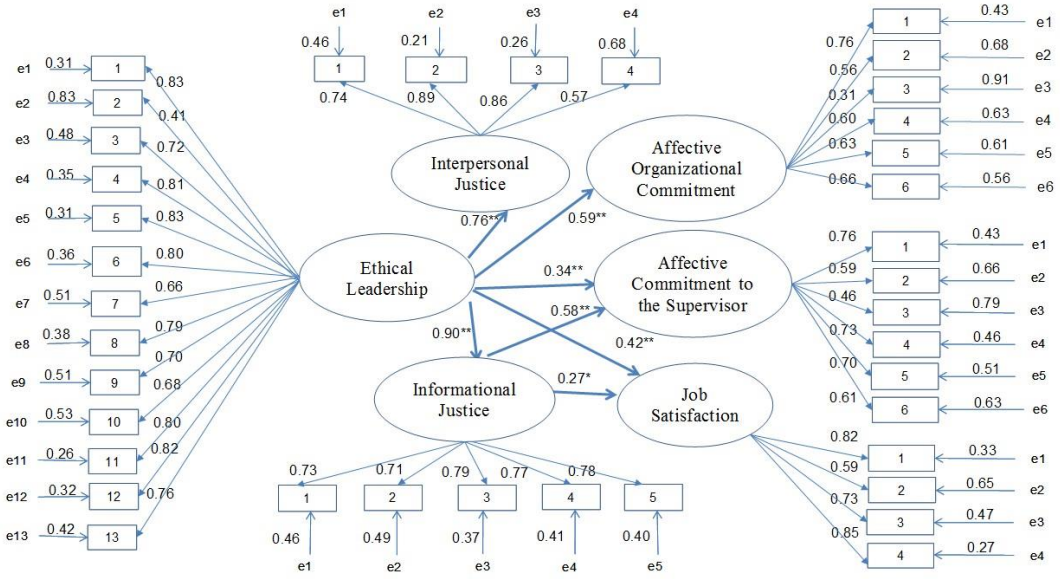

Figure 4.7 Hypothesized Ethical Leadership Model (SEM, n = 862)

Note: This figure shows only statistically significant standardized path coefficient for the hypothesized model $^{**}p < 0.01$ and $^{*}p < 0.05$. The parameters for the measurement portion and disturbance terms are not presented.

Overall, the total effects of ethical leadership on affective commitment to the supervisor combined with the effects of informational justice as a mediator were greater than the effects of ethical leadership alone (β = 0.86 vs. β = 0.34). Similarly, the total effects of ethical leadership on job satisfaction were greater than the direct effect of ethical leadership alone (β = 0.59 vs. β = 0.42). Table 4.16 provides a summary of the direct and indirect effects of ethical leadership.

Table 4.17 Total, Indirect, and Direct Effects of Ethical Leadership

	TE	SE	*t*	IE	SE	*t*	DE	SE	*t*
Ethical leadership									
INTERJ	0.76	0.04	18.71				0.76	0.04	18.71
INFOJ	0.91	0.04	21.91				0.91	0.04	21.91
CMO	0.57	0.04	14.16	–0.02	0.11	–0.18	0.59	0.12	4.76
CMS	0.86	0.04	24.55	0.52	0.09	5.54	0.34	0.10	3.48
Job satisfaction	0.59	0.04	15.58	0.17	0.11	1.60	0.42	0.11	3.71
INTERJ									
COM	–0.06	0.09	–0.71				–0.06	0.09	–0.71
CMS	–0.01	0.06	–0.12				–0.01	0.06	–0.12
Job satisfaction	–0.10	0.07	–1.49				–0.10	0.07	–1.49
INFOJ									
COM	0.02	0.14	0.21				0.02	0.14	0.21
CMS	0.58	0.12	4.86				0.58	0.12	4.86
Job satisfaction	0.27	0.32	2.07				0.27	0.13	2.07

Note: TE = total effect; DE = direct effect; SE = standardized solution; IE = indirect effect; *t* = t-value; CMO = affective organizational commitment; CMS = affective commitment to the supervisor; INTERJ = interpersonal justice; INFOJ = informational justice.

The two alternative models were investigated for model fit. The fully mediated model (Model B) constrained to zero the path of the direct effect of ethical leadership on the three dependent variables. The results demonstrated that the fully mediated model did not fit the data. An alternative model included no mediation (Model C), which was achieved by dropping the mediating path. The results showed that the no-mediating model also fit the data, with a χ^2 of 412.85 (df = 371, p = 0.07, GFI = 0.98, AGFI = 0.95, RMSEA = 0.01, CFI =1, SRMR = 0.02), which indicated a direct effect of ethical leadership on all the variables in this study.

With reference to Kline (2011), the Akaike information criterion (AIC) is used in SEM to choose among competing non-hierarchical models estimated with the same data. The model with the smallest AIC value is selected because it is likely to be

replicated. The AIC values for the partially mediated and no-mediating models were quite similar. Moreover, both models passed the chi-square test, and the values of the approximate fit indices were acceptable. The partially mediating model was selected for result explanation and discussion. Table 4.18 presents the fit indices for the models.

Table 4.18 Fit Indices for the Structural Models (n = 862)

Model	χ^2	*df*	GFI	AGFI	RMSEA	CFI	SRMR	*p*-value	AIC
Model A	412.17	370.00	0.98	0.95	0.01	1.00	0.02	0.06	1145.72
Model B	567.50	369.00	0.97	0.93	0.03	1.00	0.03	0.00	1313.22
Model C	412.95	371.00	0.98	0.95	0.01	1.00	0.02	0.07	1144.23

Note: Model A = hypothesized model (partially mediated model); Model B = fully mediated model; Model C = no-mediating model; χ^2 = a chi-squared test of fit statistic; *df* = degrees of freedom.

4.4 Chapter Summary

This chapter aimed to test the hypotheses to answer the research questions. Before testing the hypotheses, EFA and CFA were performed. EFA aimed to investigate the issues of common method bias, which is more common in cross-sectional design studies, and to test the provisional correctness of the number of factors in the hypothesized model. The results demonstrated six primary factors—the same as the hypothesized model—and the results did not indicate common method bias. Following this, a series of CFA were conducted to confirm the measurement model, before testing the hypothesized model. Each measurement model demonstrated a good fit in both the χ^2 test of fit statistic ($p > 0.05$) and approximate fit indexes (GFI > 0.95, AGFI > 0.95, SRMR < 0.08, RMSEA < 0.05), with no item to be excluded.

The hypothesized model demonstrated statistically significant model fit. Ethical leadership demonstrated a statistically significant positive direct effect on all employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction. The finding of an indirect effect of ethical leadership

via the two types of interactional justice demonstrated that interpersonal justice had no statistically significant effect on any of the attitudes, whereas informational justice had a statistically significant positive effect on affective commitment to the supervisor and job satisfaction. Table 4.19 presents a summary of the research findings.

Table 4.19 Summary of Research Findings

Hypothesis	Support/Reject
H1a: Ethical leadership has a direct effect on affective organizational commitment	Support
H1b: Ethical leadership has a direct effect on affective commitment to the supervisor	Support
H1c: Ethical leadership has a direct effect on employee job satisfaction	Support
H2a: Informational justice mediates the effect of ethical leadership and affective organizational commitment	Reject
H2b: Informational justice mediates the effect of ethical leadership and affective commitment to the supervisor	Support
H2c: Informational justice mediates the effect of ethical leadership and job satisfaction	Support
H2d: Interpersonal justice mediates the effect of ethical leadership and affective organizational commitment	Reject
H2e: Interpersonal justice mediates the effect of ethical leadership and affective commitment to the supervisor	Reject
H2f: Interpersonal justice mediates the effect of ethical leadership and job satisfaction	Reject

The next chapter presents a discussion of these results, as well as the study conclusions, implications for HR practice, limitations, and recommendations for future research.

CHAPTER 5

RESEARCH SUMMARY, DISCUSSION, LIMITATIONS, AND IMPLICATIONS

As previously discussed, the purposes of this study were to validate the effects of ethical leadership in a business context in Thailand, and to examine the two types of interactional justice—informational and interpersonal justice—as potential mediators. The findings support previous research and extend understandings about the differentiating roles of the two types of interactional justice in the relationship between ethical leadership and employee work attitudes. This chapter consists of a summary of this research, including the research objectives and methodology, and responses to the research questions. This chapter also discusses the research findings, including the effects of ethical leadership on employee work attitudes, and the mediating roles of informational justice and interpersonal justice. Finally, this chapter discusses the study limitations and implications for future research and practice.

5.1 Summary

5.1.1 Research Objectives, Questions, and Hypotheses

Due to the importance of organizational leaders, who play a role in influencing their employees' attitudes and behaviors in order to achieve the organization's goals, leaders with ethical behavior are crucial for establishing an ethical organization, and are viewed as effective leaders (Aronson, 2001). In parallel with the importance of ethical leadership, interactional justice is necessary for organizations because it is linked to the attitudes and behaviors of employees toward their leader (Cohen-Charash & Spector, 2001).

The mainstream research on ethical leadership has been conducted in Western countries, and has demonstrated that ethical leadership affects employee work attitudes,

including affective organizational commitment and job satisfaction. Previous studies have also indicated that interaction justice affects employee work attitudes. However, several studies have combined the two types of interactional justice into one measurement; thus, the effects from information justice or interpersonal justice remain unclear. In addition, there have been limited studies exploring the two types of interactional justice in a mediating role on the relationship between ethical leadership and employee outcomes.

Thus, this research was designed with two main objectives. First, this study was designed to investigate the effects of ethical leadership on employee work attitudes, encompassing affective organizational commitment, affective commitment to the supervisor, and job satisfaction. Second, this research aimed to contribute interactional justice knowledge by exploring the effects of the two types of interactional justice in mediating the relationship between ethical leadership and employee work attitudes.

This research focused on the relationships between ethical leadership and employee work attitudes outcomes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction. Moreover, this research explored the mediating roles of interactional justice—for both informational and interpersonal justice—in the relationship between ethical leadership and employee work attitudes. The following questions were identified in order to accomplish the objectives of this study:

1) Research Question 1: Does ethical leadership affect employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

2) Research Question 2: Does the perception of interactional justice—interpersonal and informational justice—mediate the effects of ethical leadership and employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction?

To accomplish the research objectives, this research first reviewed the literature on ethical leadership and key employee work attitudes, including affective organizational commitment, affective commitment to the supervisor, and job satisfaction. The literature review included the relevant definitions, concepts, measurements, antecedents, and consequences of each variable.

The purpose of the research was also to examine the mediating roles of the two types of interactional justice. The literature review included the definitions and constructs, measurements, antecedents, and consequences of interactional justice. According to the literature review, a key research issue has been inconsistency in the measurement of interactional justice, whereby several studies have combined these two types of justice into one measurement. Therefore, the effects of interactional justice due to informational justice (the perception of details and complete information) or interpersonal justice (the perception of dignity and respect from leaders) remain unclear. Colquitt (2001) conducted a previous study and found that the two types of interactional justice had factorial distinction and had different effects to the outcomes. Therefore, the study examined the mediating roles of the two types of interactional justice—informational and interpersonal justice—in the relationship between ethical leadership and employee work attitudes. The hypotheses in the research were as follows:

H1a: Ethical leadership has a direct effect on affective organizational commitment.

H1b: Ethical leadership has a direct effect on affective commitment to the supervisor.

H1c: Ethical leadership has a direct effect on employee job satisfaction.

H2a: Informational justice partially mediates the effect of ethical leadership and affective organizational commitment.

H2b: Informational justice partially mediates the effect of ethical leadership and affective commitment to the supervisor.

H2c: Informational justice partially mediates the effect of ethical leadership and job satisfaction.

H2d: Interpersonal justice partially mediates the effect of ethical leadership and affective organizational commitment.

H2e: Interpersonal justice partially mediates the effect of ethical leadership and affective commitment to the supervisor.

H2f: Interpersonal justice partially mediates the effect of ethical leadership and job satisfaction.

5.1.2 Methods

In order to test the hypotheses, this study employed quantitative methods. The advantage of quantitative methods is the ability to conduct a broad survey, which involves many subjects and generalization of findings. The pilot test aimed to develop the measurement tools in the Thai language, and this study validated that measurement in the Thai context. The questionnaire had a self-report format, consisting of questions related to the variables: ethical leadership, informational justice, interpersonal justice, affective organizational commitment, affective commitment to the supervisor, and job satisfaction.

The scale of ethical leadership was adapted from the ELS by Brown et al. (2005), plus the additional three items from Charoensap (2015). Both the affective organizational commitment and affective commitment to the supervisor scales were adapted from Meyer et al. (1993), while the job satisfaction scale was adapted from Judge et al. (2000), which was originally from Brayfield and Rothe (1951). The informational justice and interpersonal justice scales were adapted from Colquitt (2001).

The sample target was then identified. The sample frame of this research was designed to enroll employees in various business sectors. Therefore, this study selected MBA students from four of the top universities in Thailand. The total number of MBA students at the four universities in 2016 was 2,255 students. One thousand questionnaires were returned, with a response rate of 44.34%. Data screening was performed using a statistical descriptive analysis and a manual check of the demographics of the sample and their managers to ensure there was one participant rating per supervisor. Questionnaires with missing data were excluded. Finally, 862 participants were included in the data analysis.

SEM was selected to test the hypotheses by using the LISREL 8.72 package (Jöreskog & Sörbom, 2005). To assess model fit, the study employed well-established and widely used indices: a χ^2 test of fit statistics and approximate fit indices. According to Kline (2011), four approximate fit indices have been widely reported in the SEM literature: the Steiger–Lind RMSEA, Jöreskog–Sörbom GFI and AGFI, Bentler CFI, and SRMR. To demonstrate model fit, the χ^2 value should not be significant ($p > 0.05$); RMSEA should be less than 0.05 (indicating a “good fit”); and GFI and AGFI should

generally be 0 to 1.0, where 1.0 indicates the best fit. The combination of a CFI and SRMR threshold to conclude "acceptable fit" is based on CFI being ≥ 0.95 and SRMR ≤ 0.08.

Before testing the hypotheses, EFA and CFA were performed. EFA was aimed to test common method bias by applying Harman's single factor test, as suggested by Podsakoff et al. (2003), and to test the provisional correctness of the number of factors in the hypothesized model (Hayduk & Glaser, 2000). The results from EFA showed that six primary factors in the hypothesized model accounted for 55.50% of the total variance explained. Therefore, it passed the criteria and the results did not indicate common method bias (Podsakoff et al., 2003).

Following this, a series of CFA were performed to confirm the measurement model before testing the hypothesized model. The items were specified as observed variables. A correlation matrix of the items for each measurement was loaded through the program syntax for analysis using model estimation through maximum likelihood. Each measurement model demonstrated a good fit in both the χ^2 test of fit statistic (p > 0.05) and approximate fit indexes (GFI > 0.95, AGFI > 0.95, SRMR < 0.08, RMSEA < 0.05). Therefore, all measurement models were satisfied and then the researcher continued to test the hypotheses using these measurements, without any item exclusion.

5.1.3 Findings in Response to Research Questions and Hypotheses

SEM was selected to test the hypothesized model. With respect to the CFA measurement model, the researcher included the paths from ethical leadership to each employee work attitude variable (affective organizational commitment, affective commitment to the supervisor, and job satisfaction), and from informational justice and interpersonal justice to each employee work attitude. Although all employee work attitudes had inter-correlations, and both informational and interpersonal justice had inter-correlation, these paths were constrained because they were outside the scope of this study. The χ^2 test of fit statistic and approximate fit indices were used to estimate the overall fit of the model. The hypothesized model (Model A: partially mediated model) demonstrated statistically significant model fit with a χ^2 of 412.165 (df = 370, p = 0.064, GFI = 0.976, AGFI = 0.952, RMSEA = 0.010, CFI =1, SRMR = 0.019). The research findings responded to the research questions as follows.

Research Question 1: Does ethical leadership affect employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction? SEM was performed to answer the research questions. Overall, ethical leadership affected all the study employee work attitudes as per the following:

1) Ethical leadership demonstrated a statistically significant positive direct effect on affective organizational commitment ($\beta = 0.59$, $p < 0.01$). The results supported Hypothesis 1a.

2) Ethical leadership demonstrated a statistically significant positive direct effect on affective commitment to the supervisor ($\beta = 0.34$, $p < 0.01$). The results supported Hypothesis 1b.

3) Ethical leadership demonstrated a statistically significant positive direct effect on job satisfaction ($\beta = 0.42$, $p < 0.01$). The results supported Hypothesis 1c.

Research Question 2: Does the perception of interactional justice (informational and interpersonal justice) partially mediate the effect of ethical leadership and employee work attitudes: affective organizational commitment, affective commitment to the supervisor, and job satisfaction? Overall, the research findings demonstrated the different effects of the two types of interactional justice. Informational justice partially mediated the effect of ethical leadership on affective commitment to the supervisor and job satisfaction, yet had no mediating role on affective organizational commitment. In contrast, interpersonal justice had no effect on the relationship between ethical leadership and any employee work attitudes.

The summary of the research findings is as follows:

1) Informational justice partially mediated the relationship between ethical leadership and affective commitment to the supervisor ($\beta = 0.58$, $p < 0.01$). The results supported Hypothesis 2b.

2) Informational justice partially mediated the relationship between ethical leadership and job satisfaction ($\beta = 0.27$, $p < 0.05$). The results supported Hypothesis 2c.

3) Informational justice had no mediating role on the relationship between ethical leadership and affective organizational commitment ($\beta = 0.02$, $p > 0.05$). The results rejected Hypothesis 2a.

4) Interpersonal justice had no mediating role on the relationship between ethical leadership and affective organizational commitment ($\beta = -0.06$, $p > 0.05$). The results rejected Hypothesis 2d.

5) Interpersonal justice had no mediating role on the relationship between ethical leadership and affective commitment to the supervisor ($\beta = -0.01$, $p > 0.05$). The results rejected Hypothesis 2e.

6) Interpersonal justice had no mediating role on the relationship between ethical leadership and job satisfaction ($\beta = -0.01$, $p > 0.05$). The results rejected Hypothesis 2f.

5.2 Discussion of the Research Findings

This section discusses the research findings regarding the effect of ethical leadership on employee work attitudes (affective organizational commitment, affective commitment to the supervisor, and job satisfaction), which answers Research Question 1. This section then discusses the findings of the mediator test regarding informational and interpersonal justice, which answers Research Question 2. In addition, this section discusses the measurement of ethical leadership (extended-ELS), which demonstrates interesting findings.

5.2.1 Effects of Ethical Leadership on Employee Work Attitudes

The findings from this research revealed that ethical leadership affects all the studied employee work attitudes (affective organizational commitment, affective commitment to the supervisor, and job satisfaction). These results are consistent with those of previous research that showed that ethical leadership is positively linked to these employee work attitudes (Demirtas & Akdogan, 2015; Hansen et al., 2013; Kim & Brymer, 2011; Neubert et al., 2009, 2013; Neves & Story, 2015; Okan & Akyüz, 2015; Pucic, 2015; Yang, 2014). Therefore, this present study supports previous research and validates the effects of ethical leadership in the business setting in

Thailand. The effect of ethical leadership on each employee work attitude is discussed as follows.

5.2.1.1 Ethical Leadership and Affective Organizational Commitment

Hypothesis 1a of this study stated that the perception of ethical leadership influences affective employee commitment to the organization. The research findings demonstrated that ethical leadership has a significant influence on affective organizational commitment, which supported Hypothesis 1a described in Chapter 4.

According to Meyer and Allen (1991), affective commitment refers to an individual's emotional attachment to an organization. Employees with strong affective commitment continue employment with the organization, are willing to be involved in the organization, and strongly identify with the organization's goals. Therefore, having ethical leaders benefits an organization. Several studies have demonstrated that ethical leaders influence affective organizational commitment, and the study findings are congruent with previous research (Celik et al., 2015; Demirtas & Akdogan, 2015; Hansen et al., 2013; Kim & Brymer, 2011; Neubert et al., 2009; Neubert et al., 2013; Neves & Story, 2015; Pucic, 2015).

Brown and Trevino (2006) argued that the construct of ethical leadership seems to be universal, and that ethical leadership is considered an important leadership style because it has the potential to influence followers' positive attitudes, including followers' commitment. This study demonstrates that higher levels of ethical leadership perception are associated with a higher level of affective organizational commitment. Moreover, higher perception of ethical leadership has a positive influence on affective organizational commitment, which validates the effects of ethical leadership.

5.2.1.2 Ethical Leadership and Affective Commitment to the Supervisor

Hypothesis 1b of this study stated that the perception of ethical leadership influences affective commitment to the supervisor. The research findings indicated that ethical leadership positively influences affective commitment to the supervisor, which significantly supported Hypothesis 1b.

The findings were described in Chapter 4. Several studies have suggested examining the various foci of commitment, such as affective organizational commitment and affective commitment to the supervisor, because these are crucial and

related to employees' attitudes, behaviors, and performance in different ways (Becker, 1992; Becker et al., 1996; Vandenberghe et al., 2004). Previous studies have demonstrated that transformational leadership influences employees' perception of commitment to the supervisor (Yang, Wu, Chang, & Chien, 2011). Similarly, ethical leadership affects perceived commitment to the supervisor (Hansen et al., 2013). This study demonstrates the strong influence of ethical leadership on employees' affective commitment to their supervisor, which contributes knowledge of ethical leadership and supports previous studies.

5.2.1.3 Ethical Leadership and Job Satisfaction

Hypothesis 1c of this study stated that the perception of ethical leadership affects job satisfaction. This study used five items from Judge et al. (2000), which was developed from Brayfield and Rothe (1951), to measure overall job satisfaction. The research findings indicated that ethical leadership significantly affects job satisfaction, which supported Hypothesis 1c.

The results align with those of previous studies (Celik et al., 2015; Neubert et al., 2009; Okan & Akyuz, 2015; Yang, 2014). The findings also validate the effect of ethical leadership, and support Brown and Trevino (2006) that ethical leadership can be considered an effective leadership style to influence followers' positive attitudes toward overall employee job satisfaction of. In addition, Sousa-Poza and Sousa-Poza (2000) conducted a cross-national analysis and concluded that an interesting job and good relationship with one's supervisor are predictors of job satisfaction that can apply to all countries. This study demonstrates that a high perception of ethical leadership associated with employees' overall job satisfaction. Therefore, ethical leadership has high potential to be a predictor of overall job satisfaction.

5.2.2 Mediating Role of Informational and Interpersonal Justice

Colquitt (2001) concluded that the two types of interactional justice are different. Informational justice is the perception of receiving detailed and complete information, while interpersonal justice is the perception of dignity and respect toward the people with whom one interacts. These are different constructs with different outcomes. However, much of the justice research has combined the two types of

interactional justice into one factor. For example, interactional justice has positive effects on employees' job performance (Shan, Ishaq, & Shaheen, 2015), engagement and trust (Agarwal, 2014), and commitment to the supervisor (Gumusluoglu et al., 2013). However, it has remained unclear whether the effects of interactional justice on those outcomes are from the specific influence of informational or interpersonal justice.

With reference to the study findings, the EFA results revealed a factorial distinction between interpersonal and informational justice, and the results from SEM demonstrated that informational justice partially mediated the effect of ethical leadership and some of the studied employee work attitudes. In contrast, interpersonal justice had no effect on the relationship between ethical leadership and any of the employee work attitudes. These findings support the previous studies that the results demonstrated the different construct (Colquitt, 2001), and the different effects of the two foci of interactional justice (Colquitt, 2001; Colquitt et al., 2001). The discussion of the mediating roles of informational and interpersonal justice on the relationship between ethical leadership and employee work attitudes is as follows.

5.2.2.1 Mediating Roles of Informational Justice

The results demonstrated that informational justice partially mediated the effect of ethical leadership and employee work attitudes—affective commitment to the supervisor and job satisfaction—yet had no effect on affective organizational commitment. These findings are congruent with previous research conclusions, in which employees could have different perceptions of justice toward their supervisor and their organizations. As the consequence, employees' attitudes and behavior are related to the sources of justice, such as leaders and organizations (Colquitt et al., 2001).

Interactional justice, which comes directly from the supervisor, will be closely linked to employee attitudes and behavior directly toward the supervisor, including job satisfaction (Cropanzano et al., 2002; Masterson et al., 2000). Meanwhile, other form of justice, such as procedural justice (which is considered to be related to the organization), will be closely linked to employee attitudes and behavior toward the organization, including organizational commitment (Masterson et al., 2000). Thought, those studies combined the items from the two form of interactional justices into one measurement, the findings in this study demonstrated the partial mediator role of

informational justice that linked to the effects of the supervisor, which is the source of justice for employee attitudes toward the supervisor.

5.2.2.2 Mediating Roles of Interpersonal Justice

The research findings showed that interpersonal justice had no mediating effects on any relationship between ethical leadership and employee work attitudes. One potential explanation for these findings is that the sample in this study was homogenous with respect to education level, and the participants were considered knowledge workers. When ethical leaders and informational justice existed, interpersonal justice had less effect on affective commitment to the supervisor and job satisfaction. The employees might need clear and timely information, which is considered informational justice, rather than polite behavior and respect from their leaders, which is considered interpersonal justice. Interestingly, the results contrasted with the initial assumptions based on previous research conducted in Thailand that showed that "respect" was one of the values that influenced employees' perceptions of their leaders as excellent leaders (Selvarajah, Meyer, & Donovan, 2013).

5.2.3 Measurement of Ethical Leadership: Extended-ELS

This study also validated a new measurement of ethical leadership. The extended-ELS demonstrated very good reliability and validity to predict ethical leadership in the business context in Thailand. Nine of the ELS items (Brown et al., 2005) demonstrated a high factor loading (0.68 to 0.81). Only one item ("My supervisor disciplines employees who violate ethical standards") showed a fair factor loading (0.42). This item is considered a transactional element that might vary in different cultures (Brown & Trevino, 2006). "Smooth interpersonal relationship orientation" is one of the top values in Thai culture, which emphasizes kind, pleasant, no-conflict interpersonal interactions (Komin, 1990). This value might affect the results of the low factor loading. A replicated study is needed to confirm this finding. The three additional items related to ethical decision making had a high factor loading (0.76 to 0.81). Therefore, the extended-ELS was demonstrated to be a strong tool for measuring ethical leadership, especially in business contexts that give full decision-making authority to leaders.

5.3 Limitations of the Research

This study had some limitations. First, it employed a self-report format and cross-sectional design (single response to the questionnaire), which can lead to common method bias. The self-report format might be best suited for attitude studies, as participants are best placed to express their attitudes about themselves, their supervisors, and their organizations. Further, the researcher could not separate measurements, as recommended by Podsakoff et al. (2003). To address the issues of common method variance, statistical remedies were used, including loading all the study variables into an EFA, as suggested by Podsakoff et al. (2003). The EFA results identified six factors that were not among the criteria for the assumption of common method variance present.

Second, this study was conducted with employees who had extended their study to the MBA level; thus, it might be considered a homogenous sample. Although the participants were from various industries, they were all considered knowledge workers and most were from the private sector. Therefore, the results are limited in their generalizability to other workers, and public or state enterprise sectors. Future research may be interested in examining the effects of ethical leadership on various employee levels in organizations, such as blue collar workers, professional workers, and employees in the government sector.

5.4 Implications for Future Research

In addition to the research suggested above, there are many areas that future studies might consider. First, the effects of ethical leadership on employee work attitudes in the business context in Thailand seem to be the same as the effects in studies conducted in other countries (Demirtas & Akdogan, 2015; Hansen et al., 2013; Kim & Brymer, 2011; Neubert et al., 2009, 2013; Neves & Story, 2015; Okan & Akyüz, 2015; Pucic, 2015; Yang, 2014). However, the transactional component might vary in different cultures or contexts (Brown & Treviño, 2006). Thus, it would be valuable to explore the ethical leadership construct—particularly the transactional component—

across cultures, genders, and sources, as suggested by Ayman and Korabik (2010), in order to compare the construct and its effects among contexts. Of interest could be the effects of ethical leadership in organizations with and without a code of conduct, and organizations in the private and government sectors.

Second, this present study explored informational and interpersonal justice as mediators, and the results indicated that, when ethical leadership and informational justice exist, interpersonal justice does not affect the relationship between ethical leadership, the two foci of affective commitment (affective organizational commitment and affective commitment to the supervisor), and job satisfaction. There have been limited studies exploring the two foci of interactional justice as mediators. Thus, further studies are needed to confirm these effects.

Third, it would be valuable to include procedural justice together with informational and interpersonal justice when examining mediating roles in relationships involving ethical leadership. Colquitt et al. (2001) concluded that procedural justice could be either a function of an organization, where a formalized decision-making system provides process control, or a function of a decision-making agent, where leaders involve members in decision making. Therefore, procedural justice could influence the relationship between leaders and employee outcomes.

Finally, overall, the extended-ELS demonstrated very good reliability and validity to predict ethical leadership in the business context in Thailand. The three additional items related to ethical decision making had high factor loadings (0.76 to 0.81). Future research is encouraged to use this measurement for ethical leadership, particularly for leaders working in organizations that give full decision-making authority to leaders.

5.5 Implications for Practices

The findings of this study have implications for two professional groups: leaders and HR practitioners. For leaders, this study demonstrates that ethical leadership influences both affective organizational commitment and affective commitment to the supervisor. Previous research has indicated that affective commitment to the supervisor

enhances employees' performance (Vandenberghe et al., 2004). Therefore, if a leader is perceived as ethical through being an ethical role model and exhibiting care, fairness, and trustworthiness, employees will support the leader to reach their goals. The results also demonstrated that ethical leaders have an indirect influence on affective commitment to the supervisor and job satisfaction via informational justice. Thus, leaders need to clearly communicate information to employees with sufficient detail and at the right time.

With respect to the implications for HR practitioners, previous research has indicated that an organization that incorporates ethics into its decision-making process generates enhanced employee job satisfaction and affective organizational commitment (Koonmee et al., 2010). Ethical leaders are the key people for creating an ethical environment in the organization by providing ethical role models and influencing employees' ethical standards (Brown et al., 2005). In terms of employees' key attitudes, the research findings demonstrated that ethical leaders' influence on employees is positive for employees themselves, for leaders, and for organizations. Therefore, attracting, selecting, training, developing, and promoting an ethical culture are key areas that HR practitioners need to address. In addition, informational justice, together with ethical leadership, would strengthen employee work attitudes, job satisfaction, and affective commitment to the supervisor.

Selecting and building ethical leaders are challenging tasks for HR practitioners. Brown et al. (2005) raised some questions related to ethical leadership, such as: How can we predict precisely whether individuals will enter the organization as ethical leaders? Do individuals enter the organization as ethical leaders, or do organizations develop them? To address these questions, HR practitioners need to be concerned about ethical leadership in their HR practices, and integrate ethical leaders into their processes. For example, selection processes need to be more carefully conducted to ensure professional leaders demonstrate ethical behavior. Several processes need to be implemented to ensure that leaders are ethical, such as reference checks and social media checks.

Moreover, training and development programs relevant to business ethics, ethical leadership, and informational justice (communicating with clear information) should be conducted on a regular basis. However, based on previous research, not all

leading companies in Thailand include ethics and informational justice (with an emphasis on how leaders explain information to their followers) in their leadership development programs (Virakul & McLean, 2012). With respect to social learning theory (Bandura, 1977), employees can learn behaviors via role modelling of the desired behavior by the organization. As part of ethical leadership with informational justice development, organizations need to create an ethical culture to enhance ethics in the organization. Reward and punishment mechanics should be clear and support an ethical culture.

In addition to the HR processes described above, it is critical to raise awareness of ethical leaders to top management in order to gain support. In addition, HR practitioners could conduct action research to develop suitable practices for their organizations. The measurement of ethical leadership might be useful to determine the outcomes of program interventions, such as the level of ethical leadership before and after the training intervention. In summary, HR practitioners need to design HR processes to build up ethical leaders and informational justice by including selection, training development, and promotion; creating an ethical culture; and raising awareness among top management. Finally, action research is a key area to emphasize ethical leadership in the organization. Thus, a combination of actions is required to ensure that ethical leaders can become a reality in organizations.

From the time Brown et al. (2005) constructed a definition for ethical leadership and determined how it could be measured, many studies of ethical leadership have been conducted. This study validated the effects of ethical leadership on employees' key work attitudes, including employee job satisfaction, affective organizational commitment and affective commitment to the supervisor. According to the study's results, it was expected that the focus on ethical leadership and the integration of ethical leaders in HR processes in organizations to continue. This study contributes to the understanding of interactional justice. The study's results demonstrated differences between the constructs of informational justice and interpersonal justice; only informational justice partially mediated the effects of ethical leadership and employee work attitudes. In addition, the study has demonstrated that the extended-ELS shows good reliability and predictive validity. The research contributes to the leadership field

because it gives insights into the relationship between ethical leadership, interactional justice, and employees' attitudes.

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APPENDICES

APPENDIX A

QUESTIONNAIRE- ENGLISH VERSION

Questionnaire

Leadership and Employee Attitudes Survey

Instruction You are invited to take part in a research study of "The impact of ethical leadership: How does it matter to me and my organization". This research is being conducted by a researcher named Anoma Charoensap, Ph.D. student, Human Resource and Organizational Development at National Institute of Development Administration (NIDA). This survey consists of 4 parts as below:

Part 1: Demographic information

Part 2: Demographic information of your supervisor

Part 3: Work attitudes

Part 4: Perception toward your supervisor

All individual answers will be confidential. The researcher will summarize the results for overall participants. This research will benefit for both practice and research contribution, and thank you so much for your contribution.

Part 1: Demographic of participants

Instruction: Please marks √ in the box ☐

1. Age	☐ 23 – 33 years	☐ 34 – 44 years
	☐ 45 – 55 years	☐ more than 55 years
2. Sex	☐ Male	☐ Female
3. Position	☐ Employee	☐ First line manager
	☐ Middle management	☐ Executive/Senior management
4. Industries	☐ Agribusiness	☐ Food and beverage
	☐ Fashion	☐ Home and office products
	☐ Pharmaceuticals	☐ Personal products
	☐ Bank	☐ Finance and securities
	☐ Insurance	☐ Automotive
	☐ Industrial materials and machine	☐ Packaging

☐ Paper and printing materials ☐ Petrochemical and chemical

☐ Energy and utilities ☐ Mining

☐ Steel ☐ Construction materials

☐ Construction services ☐ Property development

☐ Commerce services ☐ Health care services

☐ Media and publishing ☐ Professional services

☐ Tourism and leisure ☐ Transportation and logistics

☐ Information and communication technology

☐ Electronic components

☐ Others (please indicates) _____

5. Years of service with your current organization

☐ Less than 6 months ☐ 6 month to1 year ☐ >= 1 year to 3 years

☐ >= 3 years to 5 years ☐ >=5 years to 10 years ☐ more than 10 years

6. Years of service with your current supervisor

☐ Less than 6 months ☐ 6 month to1 year ☐ >= 1 year to 3 years

☐ >= 3 years to 5 years ☐ >=5 years to 10 years ☐ more than 10 years

Part 2: Demographic of your supervisor

1. Sex ☐ Male ☐ Female

2. Position ☐ First line manager

☐ Middle management ☐ Executive/Senior management

3. How many persons reported direct to your supervisor?

☐ Less than 5 person ☐ 5-7 person

☐ 8-10 person ☐ more than 10 person

4. Does your organization have code of conduct or code of practice or code of ethics or compliance?

☐ Yes ☐ No

☐ Other (please indicate) _____

Part 3: Perception about My Attitudes

Instructions: Listed below is a series of statements that represent feelings that individuals might have about the company or organization, supervisor for which your work. Please indicate the degree of your agreement with each statement from 1 to 5 with the following scale:

1 = strongly disagree, 2 = disagree, 3 = neutral/ not sure, 4 = agree, 5 = strongly Agree

Questions	**Degree of Agreement**				
	1	**2**	**3**	**4**	**5**
Affective Organizational Commitment					
1. I would be very happy to spend the rest of my career with this organization					
2. I really feel as if this organization's problems are my own					
3. I do not feel like 'part of the family' at my organization					
4. I do not feel 'emotionally attached' to this organization					
5. This organization has a great deal of personal meaning for me					
6. I do not feel a strong sense of belonging to my organization					
Affective Commitment to the Supervisor					
7. I would be very happy to spend the rest of my career with this supervisor					
8. I really feel as if my supervisor's problems are my own					

Questions	Degree of Agreement				
	1	**2**	**3**	**4**	**5**
9. I do not feel like 'part of the team'					
10. I do not feel 'emotionally attached' to my supervisor					
11. My supervisor has a great deal of personal meaning for me					
12. I do not feel a strong sense of belonging to my supervisor					
Job Satisfaction					
13. I feel fairly satisfied with my present job					
14. Most days I am enthusiastic about my work.					
15. I find real enjoyment in my work					
16. I consider my job to be rather unpleasant (R)					

Part 4: Perception towards leader

Instructions: Listed below is a series of statements that represent feelings that individuals might have towards their direct supervisor. Please indicate the degree of your agreement with each statement from 1 to 5 with the following scale:

1 = strongly disagree, 2 = disagree, 3 = neutral/ not sure, 4 = agree, 5 = strongly Agree

Questions	**Degree of Agreement**				
	1	**2**	**3**	**4**	**5**
Interpersonal Justice, Informational Justice and Leadership					
17. My supervisor has treated me in a polite manner					
18. My supervisor has treated me with dignity					
19. My supervisor has treated me with respect					
20. My supervisor has treated me refrained improper remarks or comments					
21. My supervisor has been candid in (his/her) communications with me					
22. My supervisor has explained the procedures thoroughly					
23. My supervisor has explained regarding the procedure reasonable					
24. My supervisor has communicated detail in a timely manner					
25. My supervisor seems to tailor (his/her) communications to individual's specific needs?					
26. My supervisor listen to what employees have to say					
27. My supervisor disciplines employees who violate ethical standards					

Questions	Degree of Agreement				
	1	**2**	**3**	**4**	**5**
28. My supervisor conducts his/her personal life in an ethical manner					
29. My supervisor has the best interests of employees in mind					
30. My supervisor makes fair and balanced decisions					
31. My supervisor can be trusted					
32. My supervisor discusses business ethics or values with employees					
33. My supervisor sets an example of how to do things the right way in terms of ethics					
34. My supervisor defines success not just by results but also the way that they are obtained					
35. When making decisions, my supervisor asks "what is the right thing to do"					
36. My supervisor is willing to do the right things and is responsible for the results					
37. My supervisor participates in actions and overcome obstacles in order to meet ethical standard					
38. My supervisor appreciate and recognize the employees behave in ethical manner					

APPENDIX B

QUESTIONNAIRE- THAI VERSION

แบบสอบถามเรื่องภาวะผู้นำและทัศนคติ

คำชี้แจง

1. แบบสอบถามฉบับนี้แบ่งออกเป็น 4 ส่วน คือ

    ส่วนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้ตอบแบบสอบถาม

    ส่วนที่ 2 ข้อมูลทั่วไปเกี่ยวกับหัวหน้างาน

    ส่วนที่ 3 คำถามเกี่ยวกับความรู้สึก ความคิดเห็นต่อทัศนคติในด้านงาน จำนวน 16 ข้อ

    ส่วนที่ 4 คำถามเกี่ยวกับความรู้สึก ความคิดเห็นด้านหัวหน้างาน จำนวน 22 ข้อ

2. แบบสอบถามนี้มิได้สร้างขึ้นมาเป็นแบบข้อสอบ เพราะฉะนั้นจึงไม่มีคำตอบข้อใดถูกหรือผิด ท่าน สามารถตอบได้ทุกข้อให้ตรงกับความเป็นจริง หรือตรงกับความรู้สึกที่แท้จริงของท่านให้มากที่สุด โดยไม่จำเป็นที่คำตอบของท่านจะเหมือนผู้อื่นเสมอไป
3. กรุณาตอบข้อความที่สอบถามทุกข้อ เพื่อให้ได้ข้อมูลที่สมบูรณ์มากที่สุด และโปรดอย่าเขียนชื่อของท่านลงในแบบสอบถาม คำตอบหรือข้อมูลที่ผู้ศึกษาได้มาจากท่านจะเก็บไว้เป็นความลับอย่างที่สุด
4. แบบสอบถามนี้จัดทำขึ้นเพื่อข้อมูลที่ได้จากการศึกษาครั้งนี้จะใช้ประกอบงานวิจัยของนักศึกษาปริญญาเอกในคณะพัฒนาทรัพยากรมนุษย์ สถาบันบัณฑิตพัฒนบริหารศาสตร์ (NIDA) เท่านั้น

ส่วนที่ 1 ข้อมูลทั่วไปเกี่ยวกับผู้ตอบแบบสอบถาม

คำชี้แจง: โปรดทำเครื่องหมาย √ ลงในช่อง ☐ หน้าข้อความ

1. อายุ ☐ 23 – 33 ปี ☐ 34 – 44 ปี
   ☐ 45 – 55 ปี ☐ มากกว่า 55 ปีขึ้นไป
2. เพศ ☐ ชาย ☐ หญิง
3. ตำแหน่ง ☐ พนักงาน ☐ หัวหน้างานระดับต้น (first line manager)
   ☐ ผู้บริหารระดับกลาง ☐ ผู้บริหารระดับสูง
4. ธุรกิจ ☐ ธุรกิจการเกษตร ☐ อาหารและเครื่องดื่ม
   ☐ แฟชั่น ☐ ของใช้ในครัวเรือนและสำนักงาน
   ☐ ยาและเวชภัณฑ์ ☐ สินค้าอุปโภคส่วนตัวต่าง ๆ
   ☐ ธนาคาร ☐ เงินทุนหลักทรัพย์

☐ ประกันภัยและประกันชีวิต ☐ ยานยนต์
☐ วัสดุอุตสาหกรรมและเครื่องจักร ☐ บรรจุภัณฑ์
☐ กระดาษและวัสดุการพิมพ์ ☐ ปิโตรเคมีและเคมีภัณฑ์
☐ พลังงานและสาธารณูปโภค ☐ เหมืองแร่
☐ เหล็ก ☐ วัสดุก่อสร้าง
☐ บริการรับเหมาก่อสร้าง ☐ พัฒนาอสังหาริมทรัพย์
☐ การบริการการพาณิชย์ ☐ การบริการทางการแพทย์
☐ สื่อและสิ่งพิมพ์ ☐ บริการเฉพาะกิจ
☐ การท่องเที่ยวและสันทนาการ ☐ การขนส่งและโลจิสติกส์
☐ เทคโนโลยีสารสนเทศและการสื่อสาร ☐ ชิ้นส่วนอิเลคโทรนิกส์
☐ อื่น ๆ กรุณาระบุ_____

5. อายุงานของท่านในที่ทำงานปัจจุบัน

☐ น้อยกว่า 6 เดือน ☐ 6 เดือน - 1 ปี ☐ มากกว่า 1 ปี - 3 ปี
☐ มากกว่า 3 ปี – 5 ปี ☐ มากกว่า 5 ปี - 10 ปี ☐ มากกว่า 10 ปี

6. อายุงานที่ท่านได้ทำงานกับผู้บังคับบัญชาคนปัจจุบัน

☐ น้อยกว่า 6 เดือน ☐ 6 เดือน - 1 ปี ☐ มากกว่า 1 ปี - 3 ปี
☐ มากกว่า 3 ปี – 5 ปี ☐ มากกว่า 5 ปี - 10 ปี ☐ มากกว่า 10 ปี

ส่วนที่ 2 ข้อมูลทั่วไปเกี่ยวกับผู้บังคับบัญชาและองค์กรของผู้ตอบแบบสอบถาม

1. เพศ ☐ ชาย ☐ หญิง

2. ตำแหน่ง ☐ หัวหน้างานระดับต้น (first line manager)
☐ ผู้บริหารระดับกลาง ☐ ผู้บริหารระดับสูง

3. หัวหน้างานของท่านมีผู้ใต้บังคับบัญชาสายตรงกี่คน

☐ น้อยกว่า 5 คน ☐ 5-7 คน
☐ 8-10 คน ☐ มากกว่า 10 คน

4. องค์กรของท่านกำหนดแนวทางปฏิบัติด้านจริยธรรม (code of conduct หรือ code of practice หรือ code of ethics หรือ compliance) หรือไม่

☐ มี ☐ ไม่มี ☐ อื่น ๆ (โปรดระบุ)_____

ส่วนที่ 3 ความรู้สึก ความคิดเห็นต่องาน จำนวน 16 ข้อ

คำชี้แจง : โปรดพิจารณาข้อความที่สอบถามและกรุณาเติมเครื่องหมาย √ ลงในช่องที่ตรงกับความรู้สึกและความคิดเห็นของท่านมากที่สุดเพียง 1 คำตอบ

1=ไม่เห็นด้วยอย่างยิ่ง 2=ไม่เห็นด้วย 3=ไม่แน่ใจ 4=เห็นด้วย 5=เห็นด้วยอย่างยิ่ง

ข้อคำถาม	ระดับความคิดเห็น				
	1	2	3	4	5
ด้านความมุ่งมั่นต่อองค์กร					
1. ฉันมีความสุขที่จะทำงานกับองค์กรนี้ไปตลอดชั่วอายุการทำงาน					
2. ฉันรู้สึกว่าปัญหาขององค์กรเปรียบเสมือนปัญหาของฉันเอง					
3. ฉันไม่รู้สึกว่า "เป็นส่วนหนึ่งขององค์กร" กับองค์กรที่ฉันร่วมงานในปัจจุบัน					
4. ฉันไม่มีความรู้สึกผูกพัน" กับองค์กรนี้เลย					
5. องค์กรนี้มีให้ความสำคัญกับค่านิยมของฉัน (personal meaning)					
6. ฉันแทบไม่มีความรู้สึกเหมือนเป็นเจ้าขององค์กร กับองค์กรนี้เลย					
ด้านความมุ่งมั่นต่อหัวหน้างาน					
7. ฉันมีความสุขที่จะทำงานกับหัวหน้างานท่านนี้ตลอดชั่วอายุการทำงาน					
8. ฉันรู้สึกว่าปัญหาของหัวหน้างานของฉันเปรียบเสมือนปัญหาของฉันเอง					
9. ฉันไม่รู้สึก "เป็นส่วนหนึ่งของทีม"					
10. ฉันไม่มี 'ความรู้สึกผูกพัน" กับหัวหน้างานท่านนี้เลย					

ข้อคำถาม	ระดับความคิดเห็น				
	1	**2**	**3**	**4**	**5**
11. หัวหน้าของฉันให้ความสำคัญกับค่านิยมของฉัน (personal meaning)					
12. ฉันแทบไม่รู้สึกเป็นเจ้าของกับงานที่ได้รับมอบหมายจากหัวหน้างานท่านนี้เลย					
ด้านความพอใจในงาน					
13. ฉันรู้สึกมีความพึงพอใจกับงานที่ทำในปัจจุบัน					
14. โดยส่วนใหญ่ ฉันรู้สึกมีความกระตือรือร้นในงานของฉัน					
15. ฉันทำงานด้วยความสนุกสนาน					
16. ฉันไม่มีความสุขในงานที่ทำในปัจจุบันเลย					

ส่วนที่ 4 ความรู้สึก ต่อหัวหน้างานของท่าน จำนวน 22 ข้อ

1=ไม่เห็นด้วยอย่างยิ่ง 2=ไม่เห็นด้วย 3=ไม่แน่ใจ 4=เห็นด้วย 5=เห็นด้วยอย่างยิ่ง

ข้อคำถาม	ระดับความคิดเห็น				
	1	2	3	4	5
ด้านการปฏิสัมพันธ์ การสื่อสาร และภาวะผู้นำ					
17. หัวหน้างานของฉันปฏิบัติกับฉันด้วยความสุภาพ					
18. หัวหน้างานของฉันปฏิบัติกับฉันด้วยการให้เกียรติ					
19. หัวหน้างานของฉันปฏิบัติกับฉันด้วยความนับถือ					
20. หัวหน้างานของฉันไม่มีการวิจารณ์ หรือ แสดงความคิดเห็นที่ไม่เหมาะสม					
21. หัวหน้างานของฉันสื่อสารกับฉันอย่างตรงไปตรงมา					
22. หัวหน้างานของฉันอธิบายขั้นตอนการทำงานอย่างละเอียด					
23. หัวหน้างานของฉันอธิบายขั้นตอนการทำงานอย่างมีเหตุผล					
24. หัวหน้างานของฉันสื่อสารรายละเอียดในเวลาที่เหมาะสม					
25. หัวหน้างานของฉันปรับการสื่อสารให้เหมาะ ตามความต้องการของแต่ละคน					
26. หัวหน้างานของฉันรับฟัง สิ่งที่พนักงานกล่าว					
27. หัวหน้างานของฉันลงโทษพนักงานที่ทำผิดมาตรฐานจริยธรรม					
28. หัวหน้างานของฉันประพฤติตนตามหลักจริยธรรม					

ข้อคำถาม	ระดับความคิดเห็น				
	1	2	3	4	5
29. หัวหน้างานของฉันให้ความสนใจด้านจิตใจของพนักงานเป็นอย่างมาก					
30. หัวหน้างานของฉันตัดสินใจอย่างยุติธรรมและสมดุล					
31. หัวหน้างานของฉันเป็นผู้ที่ไว้ใจได้					
32. หัวหน้างานของฉันสนทนาเรื่องจริยธรรมทางธุรกิจหรือ ค่านิยม กับพนักงาน					
33. หัวหน้างานของฉันเป็นตัวอย่างที่ดีในการปฏิบัติในสิ่งที่ถูกต้อง ในแง่ของหลักจริยธรรม					
34. หัวหน้างานของฉันคิดเห็นว่า ‘ความสำเร็จ’ ไม่ควรตัดสินที่ผลงานอย่างเดียว แต่จะดูที่วิธีการด้วย					
35. เมื่อมีการตัดสินใจ หัวหน้างานของฉันจะถามว่า ‘อะไรเป็นเรื่องที่ถูกต้องที่ควรจะปฏิบัติ’					
36. หัวหน้างานของฉันยินดีที่จะปฏิบัติในสิ่งที่ถูกต้อง และแสดงความรับผิดชอบผลจากการกระทำนั้น					
37. หัวหน้างานของฉันมีส่วนร่วมในการลงมือปฏิบัติ และฟันฝ่าอุปสรรคต่าง ๆ เพื่อปฏิบัติตามหลักจริยธรรม					
38. หัวหน้างานของฉันยกย่องพนักงานที่ปฏิบัติงานตามหลักจริยธรรม					

APPENDIX C

PILOT STUDY: MEASUREMENT DEVELOPMENT AND VALIDATION

Table C.1 Exploratory Factor Analysis

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	15.747	41.439	41.439	15.351	40.396	40.396	13.258
2	2.917	7.677	49.116	2.461	6.477	46.873	5.112
3	1.578	4.153	53.269	1.170	3.079	49.952	8.893
4	1.354	3.564	56.833	0.923	2.429	52.381	6.107
5	1.166	3.068	59.901	0.737	1.940	54.320	10.585
6	1.038	2.732	62.633	0.631	1.661	55.981	7.457
7	0.918	2.416	65.049				
8	0.841	2.212	67.261				
9	0.776	2.042	69.303				
10	0.744	1.958	71.261				
11	0.711	1.872	73.133				
12	0.685	1.802	74.935				
13	0.597	1.571	76.507				
14	0.562	1.479	77.986				
15	0.549	1.444	79.43				
16	0.528	1.389	80.818				
17	0.500	1.315	82.133				
18	0.487	1.282	83.415				
19	0.458	1.205	84.62				
20	0.456	1.201	85.821				
21	0.444	1.167	86.988				
22	0.434	1.141	88.129				
23	0.411	1.080	89.209				
24	0.377	0.991	90.200				
25	0.372	0.978	91.178				
26	0.346	0.910	92.088				
27	0.327	0.862	92.950				
28	0.314	0.827	93.777				
29	0.299	0.786	94.563				
30	0.285	0.751	95.314				
31	0.278	0.730	96.044				
32	0.262	0.689	96.733				
33	0.256	0.673	97.407				
34	0.231	0.608	98.014				

Table C.1 (Continued)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
35	0.220	0.579	98.593				
36	0.214	0.564	99.157				
37	0.194	0.512	99.669				
38	0.126	0.331	100.000				

Table C.2 Exploratory Factor Analysis Factor Loading of the Extended-ELS (n=100)

No.	Items	Factor loading
1	My supervisor listen to what employees have to say	0.77
2	My supervisor disciplines employees who violate ethical standards	0.53
3	My supervisor conducts his/her personal life in an ethical manner	0.8
4	My supervisor has the best interests of employees in mind	0.78
5	My supervisor makes fair and balanced decisions	0.87
6	My supervisor can be trusted	0.88
7	My supervisor discusses business ethics or values with employees	0.72
8	My supervisor sets an example of how to do things the right way in terms of ethics	0.83
9	My supervisor defines success not just by results but also the way that they are obtained	0.65
10	When making decisions, my supervisor asks “what is the right thing to do”	0.66
11	My supervisor is willing to do the right things and is responsible for the results	0.84
12	My supervisor participates in actions and overcome obstacles in order to meet ethical standard	0.86
13	My supervisor appreciates and recognizes the employees behave in ethical manner	0.86

Table C.3 t-test of Ethical Leadership Items (n=100)

Items	t-test for Equality of Means (Equal variances assumed)			t-test for Equality of Means (Equal variances not assumed)		
	t	*df*	Sig. (2-tailed)	*t*	*df*	Sig. (2-tailed)
1	6.81	57	0.00	6.87	45	0.00
2	5.51	57	0.00	5.56	49	0.00
3	7.51	57	0.00	7.57	47	0.00
4	8.33	57	0.00	8.41	47	0.00
5	7.61	57	0.00	7.70	41	0.00
6	7.41	57	0.00	7.48	44	0.00
7	7.08	57	0.00	7.09	57	0.00
8	6.57	57	0.00	6.62	48	0.00
9	6.15	57	0.00	6.19	48	0.00
10	5.63	57	0.00	5.64	56	0.00
11	6.25	57	0.00	6.32	41	0.00
12	7.51	57	0.00	7.59	43	0.00
13	8.85	57	0.00	8.93	47	0.00

Table C.4 Reliability Test of all Study Measurement Tools (n=100)

Measurement	M	SD	Cronbach's Alpha
ELS	3.71	0.67	0.93
Extended-ELS	3.72	0.69	0.95
Affective Commitment to Organization	3.59	0.68	0.77
Affective Commitment to Supervisor	3.73	0.72	0.86
Job Satisfaction (after delete 1 item)	3.59	0.79	0.87
Interpersonal Justice	3.84	0.71	0.83
Informational Justice	3.64	0.79	0.91

Table C.5 Means, Standard Deviations and Correlations (n=100)

	M	**SD**	**1**	**2**	**3**	**4**	**5**	**6**
Interactional Justice	3.84	0.71	1					
Informational Justice	3.64	0.79	0.66	1				
Affective Organizational Commitment	3.59	0.68	0.19	0.43	1			
Affective Commitment to the Supervisor	3.73	0.72	0.54	0.67	0.65	1		
Job Satisfaction	3.59	0.79	0.29	0.43	0.61	0.57	1	
Ethical Leadership	3.72	0.69	0.55	0.69	0.48	0.74	0.44	1

Note: All of the correlations among the study varibles were significant. M = mean; SD = standard deveation.

APPENDIX D

CORRELATION MATRIX OF THE ITEMS

Correlation Matrix

	IDP11	IDP12	IDP13	IDP14	IDE11	IDE12	IDE13	IDE14	IDE15	ACORG1	ACORG2	ACORG3	ACORG4	ACORG5	ACORG6	ACSUP1	ACSUP2	ACSUP3	ACSUP4	ACSUP5	ACSUP6	JS1	JS2	JS3	JS4	ETHIC1	ETHIC2	ETHIC3	ETHIC4	ETHIC5	ETHIC6	ETHIC7	ETHIC8	ETHIC9	ETHIC10	ETHIC11	ETHIC12	ETHIC13
IDP11	1.00																																						
IDP12	0.81	1.00																																					
IDP13	0.64	0.76	1.00																																				
IDP14	0.41	0.43	0.42	1.00																																			
IDE11	0.42	0.53	0.50	0.28	1.00																																		
IDE12	0.36	0.44	0.45	0.32	0.55	1.00																																	
IDE13	0.44	0.53	0.51	0.32	0.58	0.71	1.00																																
IDE14	0.46	0.54	0.52	0.33	0.58	0.67	0.69	1.00																															
IDE15	0.47	0.55	0.52	0.35	0.52	0.55	0.62	0.69	1.00																														
ACORG1	0.20	0.25	0.31	0.13	0.27	0.31	0.30	0.32	0.30	1.00																													
ACORG2	0.15	0.20	0.22	0.06	0.22	0.23	0.22	0.22	0.17	0.43	1.00																												
ACORG3	0.13	0.17	0.14	0.05	0.17	0.16	0.19	0.15	0.14	0.15	0.16	1.00																											
ACORG4	0.23	0.30	0.24	0.06	0.26	0.26	0.30	0.26	0.25	0.38	0.27	0.37	1.00																										
ACORG5	0.14	0.20	0.29	0.14	0.18	0.24	0.21	0.23	0.23	0.42	0.36	0.20	0.32	1.00																									
ACORG6	0.19	0.23	0.26	0.08	0.24	0.22	0.23	0.23	0.22	0.51	0.46	0.26	0.50	0.43	1.00																								
ACSUP1	0.40	0.44	0.47	0.27	0.49	0.48	0.52	0.51	0.54	0.54	0.31	0.15	0.31	0.33	0.37	1.00																							
ACSUP2	0.28	0.32	0.37	0.22	0.37	0.35	0.38	0.33	0.40	0.33	0.47	0.14	0.25	0.35	0.35	0.56	1.00																						
ACSUP3	0.27	0.31	0.28	0.16	0.26	0.28	0.32	0.20	0.33	0.23	0.21	0.27	0.38	0.19	0.32	0.29	0.28	1.00																					
ACSUP4	0.40	0.47	0.46	0.22	0.46	0.42	0.51	0.46	0.49	0.26	0.25	0.25	0.49	0.27	0.41	0.56	0.43	0.48	1.00																				
ACSUP5	0.38	0.44	0.48	0.22	0.45	0.44	0.50	0.46	0.50	0.29	0.25	0.19	0.31	0.41	0.32	0.48	0.41	0.32	0.51	1.00																			
ACSUP6	0.34	0.40	0.37	0.13	0.39	0.29	0.38	0.37	0.40	0.29	0.26	0.24	0.44	0.28	0.42	0.41	0.35	0.40	0.55	0.43	1.00																		
JS1	0.25	0.33	0.35	0.12	0.37	0.34	0.36	0.39	0.36	0.57	0.31	0.17	0.42	0.38	0.43	0.46	0.34	0.31	0.38	0.37	0.39	1.00																	
JS2	0.13	0.20	0.25	0.07	0.22	0.22	0.24	0.28	0.22	0.32	0.30	0.13	0.25	0.29	0.30	0.30	0.28	0.24	0.21	0.25	0.30	0.50	1.00																
JS3	0.18	0.26	0.31	0.12	0.32	0.31	0.31	0.36	0.33	0.46	0.34	0.18	0.35	0.39	0.39	0.38	0.33	0.30	0.36	0.35	0.35	0.60	0.60	1.00															
JS4	0.27	0.35	0.34	0.15	0.38	0.32	0.39	0.39	0.36	0.50	0.34	0.20	0.46	0.38	0.49	0.44	0.36	0.42	0.48	0.38	0.46	0.65	0.62	0.72	1.00														
ETHIC1	0.30	0.60	0.57	0.36	0.56	0.49	0.59	0.57	0.60	0.24	0.24	0.16	0.28	0.29	0.23	0.52	0.40	0.32	0.52	0.50	0.43	0.40	0.25	0.34	0.41	1.00													
ETHIC2	0.17	0.21	0.24	0.09	0.31	0.28	0.30	0.33	0.29	0.19	0.18	0.14	0.14	0.19	0.16	0.24	0.17	0.17	0.25	0.26	0.18	0.20	0.16	0.24	0.22	0.29	1.00												
ETHIC3	0.45	0.52	0.48	0.34	0.47	0.43	0.52	0.47	0.49	0.28	0.22	0.14	0.28	0.24	0.25	0.44	0.33	0.27	0.48	0.46	0.37	0.35	0.17	0.33	0.34	0.56	0.40	1.00											
ETHIC4	0.47	0.56	0.54	0.37	0.48	0.50	0.57	0.56	0.61	0.36	0.24	0.10	0.25	0.27	0.26	0.55	0.41	0.31	0.49	0.49	0.37	0.39	0.26	0.32	0.36	0.63	0.29	0.57	1.00										
ETHIC5	0.46	0.57	0.52	0.34	0.55	0.53	0.61	0.61	0.61	0.34	0.27	0.15	0.25	0.28	0.27	0.57	0.42	0.30	0.54	0.50	0.38	0.40	0.20	0.34	0.41	0.68	0.35	0.61	0.70	1.00									
ETHIC6	0.45	0.55	0.54	0.34	0.55	0.47	0.58	0.54	0.53	0.32	0.26	0.16	0.28	0.25	0.29	0.58	0.43	0.27	0.56	0.46	0.43	0.35	0.23	0.32	0.37	0.61	0.32	0.64	0.69	0.71	1.00								
ETHIC7	0.33	0.42	0.43	0.24	0.43	0.46	0.48	0.50	0.49	0.34	0.25	0.14	0.27	0.29	0.30	0.40	0.34	0.27	0.43	0.44	0.34	0.37	0.24	0.28	0.37	0.45	0.39	0.54	0.51	0.53	0.52	1.00							
ETHIC8	0.46	0.52	0.51	0.27	0.51	0.53	0.58	0.55	0.54	0.37	0.26	0.17	0.31	0.28	0.30	0.54	0.40	0.27	0.53	0.46	0.39	0.40	0.28	0.28	0.41	0.58	0.37	0.71	0.58	0.65	0.68	0.65	1.00						
ETHIC9	0.34	0.44	0.44	0.28	0.45	0.45	0.50	0.48	0.47	0.24	0.24	0.13	0.27	0.25	0.26	0.48	0.40	0.26	0.45	0.44	0.36	0.37	0.25	0.30	0.37	0.48	0.30	0.53	0.54	0.56	0.53	0.52	0.59	1.00					
ETHIC10	0.34	0.43	0.45	0.28	0.42	0.49	0.52	0.46	0.47	0.32	0.22	0.11	0.25	0.26	0.25	0.44	0.35	0.23	0.41	0.44	0.31	0.36	0.26	0.33	0.33	0.45	0.33	0.47	0.51	0.50	0.49	0.51	0.58	0.52	1.00				
ETHIC11	0.44	0.53	0.50	0.37	0.54	0.52	0.57	0.52	0.55	0.33	0.26	0.16	0.28	0.27	0.28	0.54	0.42	0.30	0.52	0.48	0.41	0.35	0.26	0.34	0.39	0.57	0.32	0.60	0.57	0.62	0.65	0.49	0.66	0.58	0.61	1.00			
ETHIC12	0.41	0.51	0.50	0.36	0.55	0.57	0.61	0.58	0.57	0.37	0.30	0.15	0.31	0.31	0.31	0.55	0.45	0.30	0.51	0.49	0.42	0.41	0.30	0.39	0.42	0.55	0.34	0.59	0.60	0.63	0.65	0.55	0.68	0.60	0.61	0.77	1.00		
ETHIC13	0.41	0.53	0.48	0.32	0.50	0.51	0.56	0.56	0.54	0.32	0.27	0.12	0.26	0.27	0.27	0.47	0.38	0.27	0.44	0.44	0.37	0.39	0.26	0.34	0.40	0.53	0.38	0.60	0.58	0.59	0.58	0.60	0.63	0.54	0.54	0.66	0.70	1.00	
MEAN	4.09	4.05	3.84	3.28	3.78	3.29	3.67	3.46	3.51	3.11	3.50	3.44	3.95	3.34	3.42	3.13	3.31	3.92	3.85	3.47	3.97	3.61	3.82	3.46	3.69	3.78	3.54	3.83	3.54	3.60	3.80	3.45	3.67	3.58	3.60	3.78	3.70	3.69	
SD	0.23	0.77	0.83	1.11	0.98	1.05	0.96	1.01	1.03	1.07	0.93	1.14	0.96	0.87	1.13	1.16	1.06	1.05	1.07	0.94	0.94	0.93	0.83	0.91	1.02	0.87	0.86	0.84	1.03	0.95	0.94	0.96	0.89	0.95	0.90	0.89	0.90	0.87	

BIOGRAPHY

NAME	Mrs. Anoma Charoensap
ACADEMIC BACKGROUND	Bachelor's Degree in Pharmacy from Chiang Mai University, Thailand, 1992. Master's Degree in Business Administration from Chulalongkorn University, Thailand, 2003. Master's Degree in Human Resource and Organizational Development from National Institute of Development Administration, Thailand, 2013.
PRESENT POSITION	Training Manager for Asia and Oceania at Nestle Purina
EXPERIENCES	Field Force Effectiveness Manager at Pfizer Consumer Healthcare from 2012-2016 Operational Excellence Manager at Invida in 2012 Sales Training Manager at AstraZeneca in 2011 Head of Sales at Novartis from 2008-2010 Business Unit Head at Novartis from 2003-2008