The Effect of Employee Silence on Employee Well-Being and Work Engagement: The Moderating Effect of Mentoring Relationship in Taiwan

by

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ABSTRACT

One of the organizational behavior called employee silence has been discussed much often in the field of human resource and business management. Regardless of the silence behavior which refers to employees passively or purposefully withholding information and suggestions on critical issues of organization, employee silence is potentially dangerous not only to the organization but also to the employee’s performances and psychological state, such as employees’ well-being and work engagement. The purpose of this research is to shed lights on the effect of different types of employee silence on employee well-being and work engagement as well as moderating effect of mentoring. The sample involved 435 employees who worked in a company of at least over 30 employees and had a mentor at the same time of this research. A hierarchical regression in SPSS and path model analysis in AMOS SEM were applied to examine the relationships. The results found that different types of employee silence have different effects on employee well-being and work engagement. Also, employee well-being significantly mediates the relationship between different types of employee silence and work engagement. However, only the relationship between opportunistic silence and work engagement is moderated by mentoring. The results indicate that silence behavior should be seen as impactful antecedents which affect employee well-being and work engagement. The findings help human resource practitioners and higher level managers have a better understanding of specific types of employee silence and their relationship with employee well-being and work engagement.

Keywords: Acquiescent Silence, Defensive Silence, Pro-social Silence, Opportunistic Silence, Employee Well-Being, Work Engagement, Mentoring Relationship
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................. I

TABLE OF CONTENTS ............................................................................................. II

LIST OF TABLES .......................................................................................................... IV

LIST OF FIGURES ......................................................................................................... V

CHAPTER I  INTRODUCTION ...................................................................................... 1

  Background of Study .................................................................................................. 1
  Problem Statement ...................................................................................................... 2
  Purpose of Study ......................................................................................................... 3
  Research Questions .................................................................................................... 3
  Significance of the Study ............................................................................................ 4
  Delimitations ............................................................................................................... 4
  Definition of Key Terms ............................................................................................. 5

CHAPTER II  LITERATURE REVIEW .......................................................................... 6

  Employee Silence ....................................................................................................... 6
  The Relationship among Employee Silence, Employee Well-Being and Work
  Engagement ............................................................................................................... 10
  Employee Well-Being ................................................................................................. 13
  Work Engagement ...................................................................................................... 15
  The Relationship among Employee Well-Being and Work Engagement .................. 16
  Mentoring Relationship ............................................................................................. 18
  The Effect of Mentoring Relationship as a Moderator .............................................. 19

CHAPTER III  METHODOLOGY ................................................................................. 22

  Research Framework .................................................................................................. 22
  Research Hypothesis .................................................................................................. 23
  Research Procedure .................................................................................................... 25
  Research Design .......................................................................................................... 26
  Sampling and Data Collection .................................................................................... 26
  Instrumentation .......................................................................................................... 27
Data Analysis .................................................................................................................. 27
Measurement ................................................................................................................. 27
Validity and Reliability .................................................................................................. 29
Confirmatory Factor Analysis (CFA) ............................................................................... 30
Alpha Coefficient Test ................................................................................................... 41

CHAPTER IV FINDINGS AND DISCUSSION ................................................................. 42
Sample Profile .................................................................................................................. 42
Pearson’s Correlation Analysis ....................................................................................... 44
Path Analysis in Structural Equation Modeling ............................................................ 46
Sobel Test ......................................................................................................................... 48
Hierarchical Regression ................................................................................................. 49
Summary of Analysis Results ........................................................................................ 54

CHAPTER V CONCLUSIONS AND SUGGESTIONS .................................................. 58
Conclusions and Discussion ........................................................................................... 58
Practical Implications ..................................................................................................... 60
Research Implications .................................................................................................... 61
Research Limitations ..................................................................................................... 61
Future Research Suggestions .......................................................................................... 62

REFERENCES ................................................................................................................. 64

APPENDIX A: QUESTIONNAIRE IN ENGLISH AND CHINESE ............................. 74
LIST OF TABLES

Table 3.1. Summary of Goodness of Fit Criteria…………………………………… 30
Table 3.2. Confirmatory Factor Analysis of Employee Silence (N = 435)……… 31
Table 3.3. Summary of Goodness of Fit for Employee Well-Being
               Measurement Model of Scale……………………………………………… 33
Table 3.4. Confirmatory Factor Analysis of Employee Well-Being (N = 435).. 34
Table 3.5. Result of Multi-group Comparison of Employee Well-Being……… 34
Table 3.6. Summary of Goodness of Fit for Mentoring Relationship
               Measurement Model of Scale……………………………………………… 35
Table 3.7. Confirmatory Factor Analysis of Mentoring Relationship
               (N = 435)………………………………………………………………………… 36
Table 3.8. Result of Multi-group Comparison of Mentoring Relationship….. 36
Table 3.9. Summary of Goodness of Fit for Work Engagement Measurement
               Model of Scale…………………………………………………………………… 38
Table 3.10. Confirmatory Factor Analysis of Work Engagement (N = 435)….. 39
Table 3.11. Result of Multi-Group comparison of Mentoring Relationship…… 39
Table 3.12. Cronbach's Alpha of Measurements (N = 435)…………………… 41
Table 4.1. Descriptive Statistics on Sample Characteristics (N = 435)……… 42
Table 4.2. Mean, Standard Deviations, Correlations, and Reliability
               (N = 435)………………………………………………………………………… 45
Table 4.3. Summary of Goodness of Fit for Path Model of Work Engagement
               as the Dependent Variable and Employee Well-Being as the Mediating
               Variable (N = 435)…………………………………………………………….. 47
Table 4.4. Direct and Indirect Effects of Variables on Work Engagement……… 47
Table 4.5. Result of Regression Analysis for Different Types of Employee
               Silences as Independent Variable (N = 435)………………………………… 50
Table 4.6. Result of Regression Analysis for Moderating Effect of Mentoring
               Relationship(N = 435)………………………………………………………… 51
Table 4.7. Hypothesis Testing Results Summary………………………………… 55
LIST OF FIGURES

Figure 3.1. Research framework.................................................................22
Figure 3.2. Research procedure.................................................................25
Figure 3.3. Measurement model of different types of employee silences ..........31
Figure 3.4. Measurement model of employee well-being...............................33
Figure 3.5. Measurement model of mentoring relationship................................37
Figure 3.6. Measurement model of work engagement......................................39

Figure 4.1. Path model of work engagement as the dependent variable and employee well-being as the mediating variable (N = 435)...................................................46
Figure 4.2. Interaction plot for the moderating effect of mentoring relationship on opportunistic silence and work engagement.................................................53
CHAPTER I  INTRODUCTION

This chapter presents an overall description of this study, and it includes the background of the study and problem statement, followed by the purpose of the study, which guides readers to the purposes of this research, the research questions, delimitations and finally definitions of the key terms that are applied in the study.

Background of Study

Nowadays, organizations are asking more stringent requirement from their employees such as voicing up and taking more responsibility because of intensive competition within business environment, and higher customer expectations indicating a continuous environment of change (Quinn & Spreitzer, 1997). It is very common to find that employees only provide positive reports to supervisors for fear of being blamed or just have no confidence on their recommendations being adopted by organizations or being labeled negatively. Also, this research put more focus on the effect of specific types of employee silence behavior among employee well-being and work engagement. This describes one of the organizational behaviors called employee silence, which is harmful for organizational development and learning (Morrison & Milliken, 2000). Those who are capable of improving organizational performance are withholding their ideas and unwilling to speak up especially in Asia. Some employees are fearful of being blamed for speaking up and are unwilling to voice their opinions. Depending on the magnitude of this phenomena, employee silence could be seen as a serious potential problem of organizational development and other organizational behaviors, such as employee well-being and work engagement, which are also affect performances.

On the other hand, the rapid change of economy, technology and the globalization of many industries result in intensive competition between organizations. The soft power of human capital is getting important and has been taken into consideration in organizational performance and success. In order to enhance the manpower also obtain capable employees, organizations are more focused on employees’ feelings or so called “well-being”. More and more well-being indicators and company branding are invented, which means companies are more willing to engage the relationship with employees. Also, the academic research claimed that the higher level of employee well-being will lead to higher work engagement (Brunetto, Teo, Shacklock, & Farr-Wharton, 2012).
Consequently, organizations now put more focus on improving employee psychological feeling and health (Danna & Griffin, 1999) because “the happy workers are assumed to be more productive workers” (Zelenski, Murphy, & Jenkins, 2008) which is also the main purpose of this study.

**Problem Statement**

The researcher observed some employee behaviors which could be harmful between the organization and employees. One of the potential problems is so called employee silence which has been seen to be multidimensionality (Pinder & Harlos, 2001). For instance, the traditional industrial relations between the employer and the employees has been more damaging from employer-driven employee silence behavior (Johnstone, Barry, & Clarke, 2013). Employees’ unwilling to voice up about work-related matters has resulted in many negative consequences for individual and organizations, such as weaken organizational innovation and learning behavior (Argyris & Schön, 1978), employee’s stress and work-related mental problems (Cortina & Magley, 2003) lower organizational commitment and job satisfaction (Vakola & Bouradas, 2005). However, academic research has put more emphasis on general silence behavior rather than every different type of silence also the antecedents of employee silence rather than the consequences of employee silence behavior. In this research, the researcher investigates separately three dimensions of employee silence and their relationship to employee well-being and work engagement.

Furthermore, the adult and career developmental research proposed that mentoring relationships have great potential to effectively help protégé to accomplish employees' career development and psychological supports (Kram & Isabella, 1985; Levinson, 1978; Zey, 1984). That is, mentoring relationship is assumed to possibly strengthen or weaken the relationship between different types of employee silences and work engagement. However, little is known about how mentoring relationship moderates the relationship between employee silence and work engagement.

By investigating the gap from employee silence to work engagement, this research aims to provide a more extensive understanding of the effect of employee silence to organizational and employees’ performances, which can ultimately assist organizations’ managerial levels to solve this employee silence problem more effectively.
Purpose of Study

The aim of this research is to provide the following contributions. Firstly, it seeks to provide a more comprehensive understanding of the effect of employee silence to organizational and employees’ performances in Taiwan. Secondly, it attempts to understand the effect of specific types of employee silence to employee well-being and work engagement. Thirdly, it seeks to extend the knowledge of the relationship between employee silence, employee well-being and work engagement, while examining how mentoring relationship moderates the relationship from employee silence to work engagement. By conducting this study, the researcher hopes to help the managerial level to get better organized by using mentoring programs to avoid the phenomena of silence behavior in Taiwan.

Research Questions

According to previous research, employee silence has been claimed to have bad influence on employees’ and organizational performances. The extent to which the silence behavior will be harmful and how it damages employee well-being and work engagement is still unknown. Furthermore, the mentoring relationship which support employee’s career development is investigated as a moderator to affect the relationship between employee silence and work engagement. In conducting this research, the researcher seeks to answer the following research questions.

**Question 1:** Will different types of employee silences have different effect on employee well-being and work engagement within organizations in Taiwan?

**Question 2:** Will work engagement increase when employees’ well-being is taken care of by the organization?

**Question 3:** Will the relationship between different types of employee silences and work engagement be affected by mentoring relationship?

**Question 4:** Will employee well-being have mediating effect between different types of employee silences and work engagement?
Significance of the Study

The aim of this paper was to investigate employees’ behaviors in an organization. For example, the relationship between different types of employee silences, employee well-being and work engagement. In this research, the specific types of employee silence considered as one typical situation to discuss further relationship with other work-related variables. The mentoring relationship is considered to moderate the relationship between different types of employee silence and work engagement, which has little research reported in the literature. The research investigates the view from employees’ feelings about their organization to evaluate the level of employee silence and how it affects employees’ psychological and work performance. Consequently, the findings of this research could help business management to avoid silence phenomena and enhance employees’ relationship in their organizations, thereby improving employees’ engagement, and increasing firms’ overall competitiveness.

Delimitations

This study has some delimitations that help set the scope of this research. Delimiting the scope is necessary to make the research more feasible. Firstly, the delimitation is to extend the knowledge of specific types of employee silence, which has little research reported in Taiwan. Secondly, this study will investigate only the effect of mentoring relationship among employee silence, employee well-being and work engagement from different industries, which could provide more perspectives and data in different organizations.
Definition of Key Terms

Employee Silence
Pinder and Harlos (2001) defined employee silence as employee’s behavior of “withholding of any form of genuine expression about their behavioral, cognitive and affective evaluations of their organizational circumstances to persons who are perceived to be capable of affecting change (p. 334)”. There are four types of employee silence as Acquiescent, Defensive, Pro-social and Opportunistic Silence. Silence is one of the main potential problems to affect organizational innovation and development (Morrison & Milliken, 2000).

Work Engagement
According to Kahn (1990), employees who drives personal energies (physical, cognitive and emotional) into their work role can be characterized by a higher motivation and strong identification with their work (Bakker, Schaufeli, Leiter, & Taris, 2008). Work engagement has been define as “a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption.” (Schaufeli, Martinez, Pinto, Salanova, & Bakker, 2002).

Employee Well-Being
Ryan and Deci’s (2001) categorized the reviews of well-being into two broad dimensions: one refers to happiness, the other dealing with human potential (Ryan & Deci, 2001; Waterman, 1993). Employee well-being consists of not only work-related matters but also employees’ psychological experiences, which can be determined primarily by work and can be influenced by workplace interventions. (Page & Vella-Brodrick, 2009). It can be referred to as general well-being and job satisfaction (Vanhala & Tuomi, 2006).

Mentoring Relationship
The mentoring relationship refers to the strength of a relationship between a mentor and a protégé which develops when an experienced mentor assists with the protégés’ career, psychosocial and professional development (Ragins & McFarlin, 1990). It shows a continuum of care from the informal (short-term) to the formal (long-term) relationship, when a mentor supports a protégé with beneficial experience, knowledge and skills (Noe, 1988).
CHAPTER II  LITERATURE REVIEW

This chapter presents a brief review of the literature that is relevant to the study and helped creating its research framework. It offers an overview of the definitions used in this research, and then describes the relationship between variables. The chapter proceeds to describe previous research that has been done on employee silence, employee well-being, work engagement, and mentoring relationship.

Employee Silence

Employee silence has been proposed in different level of organizational behavior, one is individual-level behavior (Pinder & Harlos, 2001) and the other is organizational-level phenomenon (Morrison & Milliken, 2000). Previous research had claimed that silence behavior could be intentional and harmful in organization. In 1980’s, silence behavior has been studied mostly in organizational justice. The organizational fairness and the structure of organizational voice behavior were the main focus. A lot of different concepts have been investigated as antecedents about employees’ willingness of speaking up about work-related matters in organization, such as “psychological safety, implicit voice theories and organizational climate (Detert & Edmondson, 2011; Van Dyne & LePine, 1998; Morrison & Milliken, 2000; Van Dyne, Ang, & Botero, 2003).”

Furthermore, Pinder and Harlos (2001) also claimed that the silence behavior might result from its different potential motives. The employee silence is distinguished in two major definition, such as acquiescence and defensive silence. Pinder and Harlos (2001) stated that “defensive silence represented deliberate omission, while acquiescence silence is based on submission” (p. 348-349). Afterward, a third dimension of employee silence was developed, which is motivated by pro-social relationship. Van Dyne et al. (2003) emphasized on three different motivations of silence behavior which resulting from different reasons, such as turnover intention, fear, and cooperation.

In general, silence behavior could be seen as a great potential problem between an employee and the organization. Silence phenomena in workforce can harm both employees and the organization, mostly resulting from injustice and self-protected behavior (Vakola & Bouradas, 2005). For example, employee silence can be resulted from self-protection behavior or the desire to avoid useless effort (Van Dyne et al., 2003). Silence behavior can be intentional and purposeful (Pinder & Harlos, 2001). It highlights that silence behavior
is complex and multidimensional rather than the opposite of voice behavior. Some types of silence are proactive, purposeful, and intentional, when employees intentionally withhold suggestions about important information of organization which could have bad impact on organization.

**Self-Protective Implicit Voice Theories**

No matter which kinds or levels of employees, they might encounter different problems when going through daily activities in organizations. However, even when employees believe that something is useful to mention, employee often keep silence rather than voice up (Milliken, Morrison, & Hewlin, 2003; Ryan & Oestrich, 1998).

An implicit theory refers to people’s voice experiences of ordinary life in hierarchical society and concludes about where, when, why and about what speaking up is risky. (Goffman, 1974). It has been claimed that speaking up will have unexpected outcomes, such as reduced emotional well-being, or influence performance evaluations and decrease promotion opportunities (Ashford, Rothbard, Piderit, & Dutton, 1998).

The implicit theory consists of five different perspectives which are assumed to cause negative outcomes for speaking up. The first implicit theory that appeared “presumed target identification” which means that upper levels of management especially in an organizational hierarchy seen other’s suggestion as personal critique (Detert & Edmondson, 2011). The second is “perceived need to have solid data,” concrete suggestions, or complete ideas before it is good or safe enough to speak (Detert & Edmondson, 2011). The third is “Don’t bypass the boss upward,” refers to speaking up directly in front of boss by the ways of challenging, questioning, or disclosing supervisors will be seen as big trouble and unacceptable (Milliken et al., 2003). The last one is “Don’t embarrass the boss in public,” which refers to the fact that supervisors are unhappy to hear negative news, or being disobeyed, especially when facing others in a group without notice (Milliken et al., 2003). According to prior definitions (Milliken et al., 2003) “negative career consequences for speaking up” is the fifth implicit voice theory.
**Acquiescent Silence**

The acquiescent silence is seen as “passive silent behavior of withholding of relevant ideas, information and opinions for improving organization” (Pinder & Harlos, 2001). Morrison and Milliken (2000) claimed that employees often are unwilling to speak up because they think their suggestions and ideas are not valued by managerial level. When employees perceive that their suggestions will not be listened or considered, it will result in this kind of silence behavior. Consistently, research show that silence behavior as a key indicator of neglect and low involvement (Farrell, 1983).

**Defensive Silence**

Pinder and Harlos (2001) defined Defensive Silence as the behavior resulting from the fear of bad consequences of speaking up. Defensive silence refers to the “active withholding of relevant information in order to protect oneself, based on the fear that the consequences of speaking up could be harmful. Van Dyne et al. (2003) proposed that fear as the main reasons for employees to keep silent and withhold the suggestions. Employees who feel that the working environment is not safe to speak up will have this kind of silence behavior.

**Pro-social Silence**

Pro-social silence is defined as employees “withholding work-related ideas, information, or opinions with the goal of benefiting other people or the organization (Van Dyne et al., 2003, p. 1368).” Like the concept of organizational citizenship behavior, pro-social silence is an unconditional behavior that cannot be assigned by organization. Moreover, the meaning of pro-social silence refers to the willingness of protecting and cooperating with others (Van Dyne et al., 2003). Also, there is a similar relationship between pro-social silence and sportsmanship, both are characterized by more tolerance of the difficulties at work (Organ, 1988).

**Opportunistic Silence**

Knoll and Van Dick (2013) propose that “employees sometimes use withholding of information to achieve advantages for themselves”. The literature takes Williamson’s (1993) concept of opportunism as “self-interest seeking with guile”. By withholding information, it may positively help employees when they are unwilling to lose their status and authority or because they want to prevent extra working (Connelly, Certo, Ireland, & Reutzel, 2011). Consequently, the opportunistic silence could be seen as “strategically withholding work-
related ideas, information, or opinions with the goal of achieving an advantage for oneself while accepting harm of others”.

The great differences may result from types of information being withheld. That is, different organizational issues are related to distinct levels of behavior and fear (Whiteside & Barclay, 2013). For instance, employees might withhold productive suggestions (e.g., how to enhance employees’ engagement) if they feel that management will not focus on maintaining the relationship between employee and organization. This situation is categorized in acquiescent silence, but since this constructive idea will not bring a great fear, it is categorized in defensive silence. Organizational and employees’ performance suffers when the high level of silence behavior occurs in organization (Perlow & Williams, 2003). The significant influential outcomes of silence behavior on organizations that influence beyond only lack of information and connections in organization, which will have impact on employees’ performances and behaviors, such as dissatisfaction and disengagement (Morrison & Milliken, 2000). That is, employee silence behavior has bad influence on job attitudes, such as employee well-being and engagement.
The Relationship among Employee Silence, Employee Well-Being and Work Engagement

There has been increased analysis in issue of employees’ silence behavior. Previous research claimed that silence behavior is a relational concept refers to “an interpretation of voice about increasing information and communication, rather than negotiation or bargaining” (Donaghey, Cullinane, Dundon, & Wilkinson, 2011).

The situation of employee silence behavior permeates organizations (Morrison & Milliken, 2000; Pinder & Harlos, 2001). According to research, employees’ unwilling to speak up about work-related matters or fear to talk about business problems are closely related to different kind of individual performances and important organizational outcomes. For example, decreased organizational innovation (Argyris & Schön, 1978), lower organizational commitment and job satisfaction (Vakola & Bouradas, 2005). Although some research claimed that the significance of employee silence has influence beyond the information flow to employee outcomes in organizations (Pinder & Harlos, 2001), no studies have exactly examined the relationship.

The voice behavior literatures have claimed that effective voice behavior can imply organizational beneficial outcomes from employees’ proactive behaviors, such as voicing up about organizational suggestions to change organizational policies, functions and systemic matters (Morrison & Phelps, 1999; Walumbwa & Schaubroeck, 2009), and the relationship between employees and managerial level. On the contrary, the silence behavior would cause opposite consequences. By adopting a silence perspective studies help identify which are barriers and boundary conditions that keep affecting organization and enhance our understanding on other organizational outcomes. Also, there was still little research investigating which specific types of employee silence predicted the outcomes of perceived employee well-being and work engagement.

Beer and Eisenstat (2000) proposed that employee silence behavior will result in work stress, dissatisfaction and disengagement among employees within organization, which been seen as a stressor affects employee’s work attitudes and behaviors in the organization and results in less effective organizational development and process (Morrison & Milliken, 2000). Furthermore, employee silence behavior form employees’ suggestions not being listened and perceived not being valued will weaken employee’s psychological feeling and
job attitudes, such as employee well-being, engagement and satisfaction with organization (Morrison & Milliken, 2000).

Employees’ reluctance to voice up about work-related subjects has been linked to many important individual and organizational performances. For example, employees might tend to be less engaged in organizational learning and innovation, which employees will find it harder to adapt to organizational change (Argyris & Schön, 1978). Generally, employee silences are considered harmful to organization for employees withheld important or work-related information in organization. For example, fear, implicated friends, lack of opportunity for voice, and lack of organizational political skills are factors to cause silence. According to different definitions and meanings of employee silences, this research put more focus on the effect of different types of silence behaviors. That is, different types of employee silences are reasonable to have different effect on employees’ work engagement and performances.

There are four dimensions of employee silence each has different effect on employee’s work engagement. According to different motivations which are result in different degree or direction of outcomes. The research assumed that different types of employee silence will have not the same direction or influence. The negative relationship between silence behavior and work engagement could be divided into two main dimensions. First, Acquiescent Silence has a higher negative effect on work engagement, which is more passive than active based on employees’ feeling of resignation or the depression caused by no differences and changes of employees’ voice. Second, Defensive Silence has a lower negative effect than the previous one, which is based on employee’s fear of the risky consequences of speaking up. Third, Opportunistic Silence also has negative effect, which based on employees strategically withholding work-related matters to achieve advantage for themselves. On the other hand, Pro-social Silence assumed to have positive effect on work engagement that it based on employees withholding work-related information and opinions for protecting or benefiting other people and cooperative motives.

**Hypothesis 1:**
Different types of employee silences affect employee well-being in different directions.

**Hypothesis 1a:**
Silence will have a negative effect on employee well-being in organization.
**Hypothesis 1b:**
Defensive Silence will have a negative effect on employee well-being in organization.

**Hypothesis 1c:**
Pro-social Silence will have a positive effect on employee well-being in organization.

**Hypothesis 1d:**
Opportunistic Silence will have a negative effect on employee well-being in organization.

**Hypothesis 2:**
Different types of employee silences affect work engagement in different directions.

**Hypothesis 2a:**
Acquiescent Silence will have a negative effect on work engagement in organization.

**Hypothesis 2b:**
Defensive Silence will have a negative effect on work engagement in organization.

**Hypothesis 2c:**
Pro-social Silence will have a positive effect on work engagement in organization.

**Hypothesis 2d:**
Opportunistic Silence will have a negative effect on work engagement in organization.
Employee Well-Being

The concept of well-being firstly emerged in the late 1950s to investigate the quality of life to monitor social policy and improve society (Land & Spilerman, 1975). Well-being includes many different constructs, such as the terms of individual development, personal achievement, interpersonal relationship with others, and social contribution (Eid & Larsen, 2008; Diener, Suh, Lucas, & Smith, 1999). According to previous studies, there are different definitions about well-being. Firstly, well-being refers to a phenomena surrounding daily life (Diener, 1994; Parducci, 1995). That is, people are feeling good or happy when they personally perceived themselves as being so. Secondly, well-being is involved in some emotional conditions. (Larsen & Diener, 1992; Warr, 1987, 1990). Also, some researcher categorized the reviews of well-being into two broad dimensions: one refers to happiness, the other dealing with human potential (Ryan & Deci, 2001; Waterman, 1993).

The previous research claimed that the western cultures put more emphasis on how to better control environmental efforts, autonomy, and personal affective emotions in well-being. However, the easterners put more emphasis on harmony and social status in achieving highly satisfaction of well-being. Within work-related matters, well-being is greatly becoming a significant issue which means organizations recognize the importance of well-being is investigated to have more “creative, effective and socially integrated workers” in workplace (Fredrickson, 2003, pp.171). Warr (1987) proposed that different concepts of job-related well-being such as job satisfaction, organizational commitment and job-related burnout. In this research, employee well-being will be investigated as two major dimensions, such as general well-being of employee and job and career satisfaction.
**General (Psychological) Well-Being**

The term of well-being could be categorized into two major concepts: one is individual's psychological well-being, and the other is subjective well-being (Diener, Oishi, & Lucas, 2012; Diener, Suh, Lucas, & Smith, 1999). In this research, the researcher was investigating the General Well-Being (GWB), which refers to “individual feels how good and content with their life as a whole.” Psychological well-being could influence individual’s performance and behavior for having positive or negative outcomes (Spears, 2010).

**Job and Career Satisfaction**

The research on happy-productive worker have been using job satisfaction as the measure of employee happiness. Job and Career Satisfaction (JCS) can be defined as "an internal state that is expressed by affectively and cognitively evaluating an experienced job with some degree of favor or disfavor", for example, self-achievement and fulfillment of potential for work. Some research have claimed that the most important indication of job satisfaction includes employees’ engagement or involvement of their work, good relationship among colleague, high salary, autonomy and more career opportunities (Souza-Poza, 2000).
Work Engagement

Kahn (1990) argued for engagement as “the harnessing of organization members’ selves to their work roles in engagement, which employees employ and express themselves physically, cognitively, and emotionally during role performances”. Kahn (1990) defined engagement as the “simultaneous employment and expression of a person’s ‘preferred self’ in task behaviors that promote connections to work and to others, personal presence (physical, cognitive, and emotional), and active, full role performance (p. 700)”.

Work engagement is defined as employees who have “a positive and fulfilling work-related state that is characterized by vigor, dedication and absorption” (Schaufeli et al., 2002, p. 74). Work engagement is categorized into three dimensions, such as “vigor, dedication and absorption”. Vigor refers to employees have high energy, mental resilience while working (Schaufeli et al., 2002). Dedication refers to being engaged in one’s work and undergoing a sense of meaningful and inspiration at work (Schaufeli et al., 2002). Absorption is defined as employees being fully concentrated on one’s work (Schaufeli et al., 2002).

Cognitive Engagement. Kahn (1990) proposed that the level of cognitive engagement from employees’ subjectively perception of their work if it is meaningful for them, psychologically and physically safe, and whether they have enough supports to achieve their work.

Emotional Engagement refers to employees’ investment of the emotional resources and reflection of work condition. When employees are emotionally engaged at their work, they would more willing to invest their personal resources such as knowledge and skills (Shuck & Reio, 2014).

Behavioral Engagement. It’s normal that people could have different behaviors in daily working life. Behavioral engagement refers to increased levels of hard working directly toward organizational achievements (Macey & Schneider, 2008; Shuck & Wollard, 2010).
The Relationship among Employee Well-Being and Work Engagement

“Happy workers demonstrate higher levels of job-related performance behaviors than do unhappy employees (Brief, 1998; Spector, 1997)”. The work-related well-being which is also called employee well-being has been receiving a lot of interest in recent years (Van der Colff & Rothmann, 2009). It has been researched mostly in the field of business management, such as organizational behavior and human resources development. According to previous literatures, many academic research supports the relationship between employee well-being and work engagement. Brunetto et al. (2012) claimed that “work engagement is positively associated with higher levels of psychological well-being”.

Warr (1987) categorized the variables, such as “job satisfaction, organizational commitment, burnout, and employee well-being”. The measurement of employee well-being in this study include job satisfaction and general (psychological) well-being. Meanwhile, work engagement has been examined to be positively related to different types of working conditions, which influence both the organization and the employees, for example, job attitudes, job satisfaction and organizational commitment. (Hakanen, Bakker, & Schaufeli, 2006). Some researchers provided empirical evidence of work engagement as a predictor to positive organizational outcomes, such as lower turnover intention (Harter, Schmidt, & Hayes, 2002); and higher organizational commitment (Schaufeli & Bakker, 2004).

According to the happy worker–productive worker thesis, employees with higher well-being will have better performance (Wright & Cropanzano, 2000). Some research demonstrated that employee well-being and happiness is strongly connected to employees’ performances (Diener, 1984). Furthermore, employees’ positive emotions result in positive behavior and organizational effectiveness, which will help organization gain more positive outcomes from employees (Cropanzano & Wright, 2001). In this research, employee well-being means employees have higher wellness and positive emotions in organization, which showed employees receive psychological support within organization. That is, employees who have higher psychological resources, such as happiness, satisfaction and health, which will make employees to have better performances and positive behavior within organization.
**Hypothesis 3:**
Employee well-being has a mediating effect on the relationship between different types of employee silences and work engagement.

**Hypothesis 3a:** Employee well-being has a mediating effect on the relationship between Acquiescent Silence and work engagement.

**Hypothesis 3b:** Employee well-being has a mediating effect on the relationship between Defensive Silence and work engagement.

**Hypothesis 3c:** Employee well-being has a mediating effect on the relationship between Pro-social Silence and work engagement.

**Hypothesis 3d:** Employee well-being has a mediating effect on the relationship between Opportunistic Silence and work engagement.
**Mentoring Relationship**

The general meaning of mentors is defined as individuals whom have enough experience, skill and knowledge that are willing to provide career support to their protégés (Kram, 1996). Depending on mentor role theory (Kram & Isabella, 1985), mentors are categorized into two types of mentoring functions. One is “career development functions”, which help protégés to survive and encourage the progress of protégés' career development in the organization. The other is psychosocial functions which address more on interpersonal relationships to improve the protégé’s extend of competence, professional and personal development. Furthermore, the mentors also could be role model of protégés for obtaining work-related interpersonal skills to achieve employees' career and psychological needs (Kram, 1983; Zey, 1984).

Moreover, there is another category of mentoring relationship which has distinct differences between the previous, such as formal and informal mentoring relationship that have different impact on mentor’s functions and career outcomes. One is an informal relationship which is often driven by developmental needs (Kram, 1988) to make a contribution to the future of the protégés (Erickson, 1963). The other is formal mentoring relationships that is developed through the formal assignment by a third party; the mentor and protégés sometimes have not even met before the formal matching (Murray, 1991).

Mentoring refers to the connection of interpersonal relationship from experienced individual (mentor) and less experienced one (protégés) (Kram & Isabella, 1985). Mentoring relationship has been seen as a dynamic process that motivates protégés’ learning behavior and social interaction within organization (Allen, Poteet, & Burroughs, 1997). In this research, mentoring relationships was put more emphasis on the relationship with supervisors, subordinates, and colleagues. It could be seen as an alternative mentoring relationship which is relatively unavailable to many employees in organization (Kram & Isabella, 1985; Levinson, 1978). In general, understanding the functions and values of mentoring relationship which could have helpful implications for organizations to facilitate individual career development and improve the organizational effectiveness of multiple workforce.
The Effect of Mentoring Relationship as a Moderator

The career development literatures have long supported that the benefits of having a mentoring relationship for an individual's professional development and career life (Kram & Isabella, 1985; Levinson, 1978). Employees’ relationships between peers, managers and other related are found to accelerate organizational socialization, such as help employees coping with work stress and loading. (Feldman & Brett, 1983; Kram & Isabella, 1985; Levinson, 1978). Both adult analysis and career theorists have seen mentoring relationship as an important factor to improve personal development in their different career stages (Dalton, Thompson, & Price, 1977). Studies of mentoring relationship proposed that it could be functional supporting in both career development and personal growth. On the other hand, personal learning could be seen as an important instrument by which mentoring relationship is beneficial for mentors and protégés (Hirschfeld, Thomas, & Lankau, 2006; Lankau & Scandura, 2007; Ragins & Verbos, 2007). A person who is good at self-learning can rapidly and continuously benefit from different aspects regardless of their status or career process (Lankau & Scandura, 2007). In other words, the higher level of employees’ personal learning could be related to positive performances and reduce negative organizational behavior in organization.

In general, mentoring relationship could be seen as positively related to individual and organization’s development and performances (Kram, 1988). According to previous literatures, the extent to which protégés cooperate with and effectively take advantage of mentors may be influenced by their degree of job involvement and work engagement (Noe, 1988). Different types of mentoring activities, such as coaching, or challenging assignments provided by mentors may enhance protégé’s performance and increased skills (Noe, 1988). Not to mention, the psychological functions provided by mentors also are helpful in protégés’ psychological and career needs, such as employee’s well-being (Kram & Isabella, 1985; Zey, 1984). Furthermore, Social capital is also one of the benefit of protégés who have mentoring relationship, which could provide protégés different resources such as information, influence, solidarity related to work. Coleman (1988) pointed out that social capital makes “possible the achievement of certain ends that in its absence would not be possible.” For example, protégés who supported by mentor could obtain more information not only focus on work but related to their personal development by using their social capital resources.
**Hypothesis 4:**
The mentoring relationship will weaken the relationship between different types of employee silences and work engagement.

**Hypothesis 4a:** The mentoring relationship will weaken the relationship between Acquiescent Silence and work engagement.

**Hypothesis 4b:** The mentoring relationship will weaken the relationship between Defensive Silence and work engagement.

**Hypothesis 4c:** The mentoring relationship will weaken the relationship between Pro-social Silence and work engagement.

**Hypothesis 4d:** The mentoring relationship will weaken the relationship between Opportunistic Silence and work engagement.
CHAPTER III METHODOLOGY

In this chapter, the researcher presents an outline of the research method used for the study, including research framework, hypotheses, research procedure, data collection, measurement, reliability and validity of instruments and data analysis. Before continuing to the data analysis process of the main study.

Research Framework

Based on literature review, the dimensions under each construct were defined in the previous chapter. The researcher developed the research framework for this study according to the relationships that have been discovered in other studies. Refer to Figure 3.1. for the framework of employee silence, employee well-being, work engagement and mentoring relationship, which is used to address the purpose of study. The framework shows the hypotheses being tested and the variables under study.

Figure 3.1. Research framework.
**Research Hypothesis**

**Hypothesis 1:**
Different types of employee silences affect employee well-being in different directions.

**Hypothesis 1a:**
Acquiescent Silence will have a negative effect on employee well-being in organization.

**Hypothesis 1b:**
Defensive Silence will have a negative effect on employee well-being in organization.

**Hypothesis 1c:**
Pro-social Silence will have a positive effect on employee well-being in organization.

**Hypothesis 1d:**
Opportunistic Silence will have a negative effect on employee well-being in organization.

**Hypothesis 2:**
Different types of employee silences affect work engagement in different directions.

**Hypothesis 2a:**
Acquiescent Silence will have a negative effect on work engagement in organization.

**Hypothesis 2b:**
Defensive Silence will have a negative effect on work engagement in organization.

**Hypothesis 2c:**
Pro-social Silence will have a positive effect on work engagement in organization.

**Hypothesis 2d:**
Opportunistic Silence will have a negative effect on work engagement in organization.

**Hypothesis 3:**
Employee well-being has a mediating effect on the relationship between different types of employee silences and work engagement.

**Hypothesis 3a:**
Employee well-being has a mediating effect on the relationship between Acquiescent Silence and work engagement.

**Hypothesis 3b:**
Employee well-being has a mediating effect on the relationship between Defensive Silence and work engagement.
**Hypothesis 3c:**
Employee well-being has a mediating effect on the relationship between Pro-social Silence and work engagement.

**Hypothesis 3d:**
Employee well-being has a mediating effect on the relationship between Opportunistic Silence and work engagement.

**Hypothesis 4:**
The mentoring relationship will weaken the relationship between different types of employee silences and work engagement.

**Hypothesis 4a:**
The mentoring relationship will weaken the relationship between Acquiescent Silence and work engagement.

**Hypothesis 4b:**
The mentoring relationship will weaken the relationship between Defensive Silence and work engagement.

**Hypothesis 4c:**
The mentoring relationship will weaken the relationship between Pro-social Silence and work engagement.

**Hypothesis 4d:**
The mentoring relationship will weaken the relationship between Opportunistic Silence and work engagement.
Research Procedure

Based on literature review, the dimensions under each construct were defined in the previous chapter. To explain the procedure, the steps can be categorized into different stages. In research procedure, the steps are: explore background of study, select interested topic, review of literature, identify research questions, develop framework, research method and instrument, then conduct expert review and pilot test. And then, moving to data analysis process form collect data, analyze data, interpret data, and inform others.

![Research Procedure Diagram]

*Figure 3.2. Research procedure.*
**Research Design**

This study will use a quantitative approach to test the hypothesized relationships by analyzing the collected data with IBM SPSS 23.0 and SPSS Amos 24 software. By a quantitative approach, the researcher can get sufficient amount of data to statistically analyze the relationship between employee silence, employee well-being and work engagement which are moderated by mentoring relationship.

**Sampling and Data Collection**

For this study, the target population was composed of employees working in organizations of over 30 people and with mentoring relationship in the organization, in order to investigate whether the employee silence behavior will be affected by mentoring relationship in organization. Convenience sampling approach was utilized. The final sample comprised of 435 employees from different industries in Taiwan to understand silence situation in general workplace and put focus on investigating employees’ behavior in organization.

Data collection process mostly used online distribution through the months of March and April 2018. The collection process were carried out in the following ways: (1) a post and direct messaging via Facebook and Line; (2) requests to friends from specific fields/companies. In addition, all the above e-mails and posts include a request to forward the links and QR codes to friends of the addressees. As for the online questionnaires, this research received a total of 435 valid respondents in the end.
Instrumentation

This is a questionnaire-based or questionnaire-oriented research conducted in hope to figure out the factors that have effect on work engagement. The questionnaire for this study was designed with four parts including the demographic and background information. In avoidance of the bias due to respondents’ tendency when they fill out the questionnaire, the arrangement of the questionnaire was designed to respectively examine each construct in reversed causal order, such as work engagement items first, then employee well-being, employee silence and mentoring relationship. The instrument consists of measurement items of four variables, and 48 questions in total.

Data Analysis

This is a quantitative research, the data collection was obtained through questionnaires. First of all, all collected data were entered into an SPSS data file. Secondly, the researcher used SPSS and AMOS SEM to run the analysis. During data analysis process, the following analyses were conducted, including descriptive statistics, confirmatory factor analysis in AMOS, Pearson correlation analysis, path analysis in AMOS and hierarchical regression analysis.

Employee Silence

The measurement of employee silence was adopted from a previous scale (Knoll & Van Dick, 2013), by adjusting the particular word for each forms of employee silence. It comprises 12 statements to complete the item root “Sometimes I remain silent at work...”. Item formulation was adapted by the exploratory research of Brinsfield (2009) and Milliken et al. (2003), and by Van Dyne et al.’s (2003) conceptual suggestions. All items use a 5-point Likert scale from 1 to 5, from strongly disagree to strongly agree. The questionnaire consists of three dimensions. Firstly, defensive silence reflects employees intentionally withholding the ideas, a sample item is “I remained silent at work because of fear of negative consequences.” Secondly, acquiescent silence describes employees’ fear of speaking up, such as “I remained silent at work because nothing will change.” Thirdly, refers to employees wanted to cooperate and protect others, a sample statement like “I remained silent at work because I do not want to embarrass others.” is the definition of pro-social silence. Lastly, opportunistic silence describes employees are more willing to protect their advantages, a sample item is “I remained silent at work because to not give away my
knowledge advantage”. According to previous research (Knoll & Van Dick, 2013) which already indicated the most significant items for measuring different types of employee silence. After tested by Amos, the researcher decided to adopt previous research that has already been well tested by EFA and CFA.

**Employee Well-Being**

The original data for the Work-Related Quality of Life Scale were gathered via a survey of UK (Van Laar, Edwards & Easton, 2007). The conceptual model of the quality of working life, which was measured through the Work-Related Quality of Life Scale incorporates a factor structure. In this research, the researcher only focused on two major dimensions, including General Well-Being (GWB), and Job and Career Satisfaction (JCS). All items were scored on a 5-point Likert scale of 1 to 5, from strongly disagree to strongly agree.

**Work Engagement**

The research adopted the Utrecht Work Engagement Scale (UWES; Schaufeli & Bakker, 2003) as a measurement of work engagement. The three subscales of the UWES—vigor, dedication, and absorption were used in the study. All items were scored on a 7-point Likert scale from strongly disagree to strongly agree. The questionnaire consisted of three subscales. Firstly, an example item of vigor is “At my work, I feel bursting with energy.”; Secondly, an example item of dedication is “I find the work that I do full of meaning and purpose.” Thirdly, an example item of absorption is “Time flies when I'm working.”.

**Mentoring Relationship**

Mentoring function measurement was adopted from a previous research (Scandura & Ragins, 1993). This measurement included three dimensions. The first dimension is “Psychosocial support”, reflects the friendship and psychological support of mentor (Kram & Isabella, 1985), such as “I share personal problems with my mentor”. The second dimension of “Career development”, reflect protégés access the work-related support by mentor. The third dimension “Role modeling” reflects how the protégés behavior can be affected by mentors. In this research, the strength of mentoring relationship was assessed by aggregating all items in psychosocial support, career development and role modeling. All items use a 7-point Likert scale from strongly disagree to strongly agree.
Control Variables

Found by the previous scholars that work engagement might be influenced by some demographic variables. Hence, the demographic variables will be incorporated into the questionnaire as well. In this study, position level and tenure are adopted as the control variables. According to previous research, work engagement was found to have close relationship with employee’s tenure (Glavas & Piderit, 2009) and position level (Kahn, 1990). During analysis process, these two main control variables were controlled in hierarchical regression. Tenure is coded: (1) 0~1 (2) 2~3 (3) 4~5 (4) 6~7 (5) 8~9 (6) 10 and above years. Position level is coded: (1) general staff, (2) line manager, (3) middle level manager, (4) high level manager. Control variables were tested during data analysis, and the research used SPSS (Statistics Package for Social Science) hierarchical regression technique to examine the effect of control variables on work engagement.

Validity and Reliability

Confirmatory factor analysis (CFA) was utilized to ensure the instruments were appropriately designed to attain the validity of measurement. The model fit and item loadings were confirmed by CFA to assess the significance of measurement for this study (Hinkin, 1998). Besides, a Harmon’s single factor test was also conducted to verify common method variance (CMV) because of the self-reported approach for data collection. To ensure the internal consistency, an alpha coefficient test was performed. The results are presented in this section to describe the model assessment processes for the five variables: Acquiescent Silence, Defensive Silence, Pro-social Silence, Opportunistic Silence, Employee Well-Being, Mentoring Relationship and Work Engagement.
Confirmatory Factor Analysis (CFA)

CFA was a measurement to determine how well the survey model generalize through groups and time (Brown, 2014). CFA was used to examine whether the existing measurement is appropriate for the current population. Hair, Black, Babin, & Anderson (2010) indicated that there were three categories of fit indices of CFA model such as absolute fit indices, incremental fit indices and parsimony fit indices. At least one absolute index and one incremental index as well as chi-square ($\chi^2$) results should be reported to evaluate the model fit. The incremental fit index which also known as Bollen’s (1992) IFI. For IFI, the values exceeding .90 are considered as acceptable, and also can exceed 1 as well. The following are preferred criteria for goodness of fit of the model: Goodness of Fit Index (GFI), Normed Fit Index (NFI), Comparative Fit Index (CFI), Root Mean Square error of approximation (RMSEA), Non-Normed Fit Index (TLI), and Incremental Fit Index (IFI). Refer to the summary of goodness of fit criteria in Table 3.1.

Furthermore, if a research measurement failed the good fit criteria, the researcher would modify the measurement model and apply multi-group comparison between two randomly split samples to cross validate the modified model in the following steps. First, this research would use SPSS to randomly split (50 %) the full sample into two groups (Sample A= 228/435; Sample B= 207/435). Second, using multi-group comparison analysis in AMOS SEM to make sure the two samples show no significant difference when fitting the data to the same model. The above steps are applied for each modified measurement.

Table 3.1.

Summary of Goodness of Fit Criteria

<table>
<thead>
<tr>
<th>Fit Indices</th>
<th>Criteria</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\chi^2/df$</td>
<td>2.00~5.00</td>
<td>Tabachnick and Fidell, 2007</td>
</tr>
<tr>
<td>NFI</td>
<td>&gt;0.90</td>
<td>Byrne, 1994</td>
</tr>
<tr>
<td>GFI</td>
<td>&gt;0.80</td>
<td>Byrne, 1994</td>
</tr>
<tr>
<td>CFI</td>
<td>&gt;0.90</td>
<td>Byrne, 1994</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.08 ~ 0.10</td>
<td>MacCallum, Browne, &amp; Sugawara, 1996</td>
</tr>
<tr>
<td>NNFI(TLI)</td>
<td>&gt;0.90</td>
<td>Bagozzi and Yi, 1988</td>
</tr>
<tr>
<td>IFI</td>
<td>&gt;0.90</td>
<td>Hu and Bentler, 1999</td>
</tr>
</tbody>
</table>
CFA result of Employee Silence.

For the independent variable, 12 items were run through the CFA in AMOS in this procedure. Refer to Figure 3.3. that this model provides an acceptable model-to-data fit [$\chi^2$ (N = 435) = 228.695; $df$ = 48; CFI = .931; NFI = .915; IFI = .932; TLI = .905 RMSEA = .093]. Refer to Table 3.2. for Confirmatory Factor Analysis of different types of employee silence which indicated all items were significant and AVE, CR were all above acceptable value (Fornell & Larcker, 1981).

Table 3.2.

Confirmatory Factor Analysis of Employee Silence (N = 435)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimensions</th>
<th>NO</th>
<th>Factor loading</th>
<th>AVE</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiescent Silence</td>
<td>ESAS 10</td>
<td></td>
<td>.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESAS 11</td>
<td></td>
<td>.84</td>
<td>0.59</td>
<td>0.81</td>
</tr>
<tr>
<td></td>
<td>ESAS 13</td>
<td></td>
<td>.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensive Silence</td>
<td>ESDS 4</td>
<td></td>
<td>.76</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESDS 5</td>
<td></td>
<td>.69</td>
<td>0.56</td>
<td>0.79</td>
</tr>
<tr>
<td></td>
<td>ESDS 19</td>
<td></td>
<td>.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pro-social Silence</td>
<td>ESPS 6</td>
<td></td>
<td>.83</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESPS 7</td>
<td></td>
<td>.80</td>
<td>0.61</td>
<td>0.82</td>
</tr>
<tr>
<td></td>
<td>ESPS 16</td>
<td></td>
<td>.69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunistic Silence</td>
<td>ESOS 15</td>
<td></td>
<td>.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ESOS 17</td>
<td></td>
<td>.73</td>
<td>0.52</td>
<td>0.76</td>
</tr>
<tr>
<td></td>
<td>ESOS 20</td>
<td></td>
<td>.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Figure 3.3. Measurement model of different types of employee silences
CFA result of Employee Well-Being.

For the mediator, 11 items were run through the CFA in AMOS in this procedure. Refer to Table 3.3. which shows some fit indices of the initial model (11 items) were not acceptable \[ \chi^2 (N = 435) = 285.989; df = 43; CFI = .908; NFI = .894; IFI = .909; TLI = .883 \text{ RMSEA} = .111 \]. In order to improve the fit, two items were deleted from this measurement. One item (EWWB 1) “I feel well at the moment.” was deleted because of heavy cross loading in two dimensions (Hair, Black, Babin, Anderson, & Tatham, 2006, pp.149-151) which means the respondents had difficulty in recognizing this item for the designated construct in this measurement. The other item (EWJS 6) “I have a clear set of goals and aims to enable me to do my job.” Comparing with other items, it has the lowest mean in this dimension. Since the sample are Taiwanese who are known to lack confidence in defining clear goals in their work, this item may not represent well this sub-dimension, and therefore was deleted. After model respecification, the modified model (9 items) showed good fit measurement as \[ \chi^2 (N = 435) = 129.189; df = 26; CFI = .947; NFI = .934; IFI = .947; TLI = .926 \text{ RMSEA} = .093 \].

Refer to Figure 3.4 and Table 3.4 for CFA of Employee Well-Being which indicated all factor loadings were significant, while AVE and CR were all above acceptable value (Fornell & Larcker, 1981). Also, Table 3.5. showed no significant difference in the multi-group comparison which indicated the modified model is valid for the two randomly split samples.

Table 3.3.
Summary of Goodness of Fit for Employee Well-Being Measurement Model of Scale.

<table>
<thead>
<tr>
<th>Model</th>
<th>( \chi^2 )</th>
<th>df</th>
<th>( \chi^2/df )</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial CFA (11 items)</td>
<td>285.989</td>
<td>43</td>
<td>6.651</td>
<td>.894</td>
<td>.908</td>
<td>.111</td>
<td>.883</td>
<td>.909</td>
</tr>
<tr>
<td>Modified CFA (9 items)</td>
<td>129.189</td>
<td>26</td>
<td>4.469</td>
<td>.934</td>
<td>.947</td>
<td>.093</td>
<td>.926</td>
<td>.947</td>
</tr>
</tbody>
</table>
Table 3. 4.

Confirmatory Factor Analysis of Employee Well-Being ($N = 435$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimension</th>
<th>NO Factor loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Well-Being</td>
<td>EWWB 2R</td>
<td>.39</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWWB 3</td>
<td>.83</td>
<td>.81</td>
<td>.53</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWWB 4</td>
<td>.85</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWWB 5</td>
<td>.75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Well-Being</td>
<td>EWJS 7</td>
<td>.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWJS 8</td>
<td>.70</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWJS 9</td>
<td>.69</td>
<td>.85</td>
<td>.54</td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWJS 10</td>
<td>.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job Satisfaction</td>
<td>EWJS 11</td>
<td>.79</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. 5.

Result of Multi-group Comparison of Employee Well-Being

<table>
<thead>
<tr>
<th>Model</th>
<th>DF</th>
<th>CMIN</th>
<th>P</th>
<th>NFI</th>
<th>IFI</th>
<th>RFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement weights</td>
<td>7</td>
<td>7.306</td>
<td>.398</td>
<td>.004</td>
<td>.004</td>
<td>-.010</td>
<td>-.010</td>
</tr>
<tr>
<td>Structural covariances</td>
<td>19</td>
<td>12.431</td>
<td>.866</td>
<td>.006</td>
<td>.006</td>
<td>-.025</td>
<td>-.026</td>
</tr>
</tbody>
</table>

Figure 3. 4. Measurement model of employee well-being
CFA result of Mentoring Relationship.

For the moderator, 15 items were run through the CFA in AMOS in this procedure. Refer to Table 3.6. which shows the initial model (15 items) had less than satisfactory fit as \[X^2 (N = 435) = 554.473; df = 87; CFI = .918; NFI = .904; IFI = .918; TLI = .901 \text{ RMSEA} = .111\]. In this measurement, one item was deleted, the item (ME 14) “Mentor has devoted special time and consideration to my career.” The item cross loaded (Hair et al., 2006, pp.149-151) between career support and psycho-social support dimensions which means to the respondents the meaning of this item highly overlaps between two constructs and therefore was deleted. After remodel re-specification, the modified model (14 items) showed improved model fi as \[X^2 (N = 435) = 365.160; df = 74; CFI = .943; NFI = .930; IFI = .944; TLI=.930 \text{ RMSEA} = .095\].

Refer to Figure 3.5 and Table 3.7 for CFA of Mentoring Relationship which indicated all items’ factor loading were significant, while AVE and CR were all above acceptable value (Fornell & Larcker, 1981). Also, Table 3.8. showed no significant difference in the multi-group comparison which indicated the modified model is valid for the two randomly split samples.

Table 3.6.
Summary of Goodness of Fit for Mentoring Relationship Measurement Model of Scale.

<table>
<thead>
<tr>
<th>Model</th>
<th>(X^2)</th>
<th>(df)</th>
<th>(\chi^2/df)</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial CFA</td>
<td>554.473</td>
<td>87</td>
<td>6.373</td>
<td>.904</td>
<td>.918</td>
<td>.111</td>
<td>.901</td>
<td>.918</td>
</tr>
<tr>
<td>(15 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Modified CFA</td>
<td>365.160</td>
<td>74</td>
<td>4.935</td>
<td>.930</td>
<td>.943</td>
<td>.095</td>
<td>.930</td>
<td>.944</td>
</tr>
<tr>
<td>(14 items)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 3. 7.
Confirmatory Factor Analysis of Mentoring Relationship (N = 435)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimension</th>
<th>NO</th>
<th>Factor loading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role</td>
<td>ME 8</td>
<td></td>
<td>.86</td>
</tr>
<tr>
<td>Model</td>
<td>ME 9</td>
<td></td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>ME 13</td>
<td></td>
<td>.82</td>
</tr>
<tr>
<td></td>
<td>ME 11</td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>Mentoring Relationship</td>
<td>Career</td>
<td>ME 1</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>Support</td>
<td>ME 2</td>
<td>.78</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ME 3</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ME 4</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ME 6</td>
<td>.85</td>
</tr>
<tr>
<td>Psycho-Social Support</td>
<td>ME 7</td>
<td></td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>ME 5</td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td></td>
<td>ME 10</td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>ME 12</td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>ME 15</td>
<td></td>
<td>.74</td>
</tr>
</tbody>
</table>

Table 3. 8.
Result of Multi-group Comparison of Mentoring Relationship

<table>
<thead>
<tr>
<th>Model</th>
<th>DF</th>
<th>CMIN</th>
<th>P</th>
<th>NFI Delta-1</th>
<th>IFI Delta-2</th>
<th>RFI rho-1</th>
<th>TLI rho2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement weights</td>
<td>11</td>
<td>13.603</td>
<td>.256</td>
<td>.003</td>
<td>.003</td>
<td>-.004</td>
<td>-.005</td>
</tr>
<tr>
<td>Structural covariances</td>
<td>17</td>
<td>21.606</td>
<td>.200</td>
<td>.004</td>
<td>.004</td>
<td>-.006</td>
<td>-.007</td>
</tr>
</tbody>
</table>
Figure 3.5. Measurement model of mentoring relationship
CFA result of Work Engagement.

For the dependent variable, 17 items were run through the CFA in AMOS in this procedure. Refer to Table 3.9, which shows the initial model (17 items) had less than satisfactory fit as \[X^2(N = 435) = 777.183; df = 116; \text{CFI} = .889; \text{NFI} = .872; \text{IFI} = .882; \text{TLI} = .870 \text{ RMSEA} = .115\]. In this measurement, four items were deleted. Firstly, item (WGAB14) “I get carried away when I’m working.” and item (WGAB16) “It is difficult to detach myself from my job.” These two items presented similar concept about employees who are very engaged at work in same dimension, thus had higher covariances between items, and were deleted. Secondly, item (WGDE10) “I am proud on the work that I do.” which means to the respondents the meaning of this item highly overlaps with other two constructs and therefore was deleted. Lastly, the item (WGV117) “At my work I always persevere, even when things do not go well.” had low correlation with subscales (vigor), which indicated poor consistency and was deleted. After remodel re-specification, the modified model (13 items) showed improved fit measurement as \[X^2(N = 435) = 295.767; df = 62; \text{CFI} = .944; \text{NFI} = .930; \text{IFI} = .944; \text{TLI} = .930 \text{ RMSEA} = .095\].

Refer to Figure 3.6 and Table 3.10 for CFA of Work Engagement which indicated all items’ factor loading were significant, while AVE and CR were all above acceptable value (Fornell & Larcker, 1981). Also, Table 3.11. showed no significant difference in the multi-group comparison which indicated the modified model is valid for the two randomly split samples.

### Table 3.9.
**Summary of Goodness of Fit for Work Engagement Measurement Model of Scale**

<table>
<thead>
<tr>
<th>Model</th>
<th>(X^2)</th>
<th>(df)</th>
<th>(X^2/df)</th>
<th>NFI</th>
<th>CFI</th>
<th>RMSEA</th>
<th>TLI</th>
<th>IFI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial CFA (17 items)</td>
<td>777.183</td>
<td>116</td>
<td>6.700</td>
<td>.872</td>
<td>.889</td>
<td>.115</td>
<td>.870</td>
<td>.882</td>
</tr>
<tr>
<td>Modified CFA (13 items)</td>
<td>295.767</td>
<td>62</td>
<td>4.770</td>
<td>.930</td>
<td>.944</td>
<td>.093</td>
<td>.929</td>
<td>.944</td>
</tr>
</tbody>
</table>
Table 3. 10.
Confirmatory Factor Analysis of Work Engagement ($N = 435$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimension</th>
<th>NO</th>
<th>Factor loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vigor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Factor loading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dedication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables</th>
<th>Dimension</th>
<th>NO</th>
<th>Factor loading</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Work Engagement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vigor</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Factor loading</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CR</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>AVE</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dedication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Absorption</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3. 11.
Result of Multi-group Comparison of Mentoring Relationship

<table>
<thead>
<tr>
<th>Model</th>
<th>DF</th>
<th>CMIN</th>
<th>P</th>
<th>NFI Delta-1</th>
<th>IFI Delta-2</th>
<th>RFI rho-1</th>
<th>TLI rho2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Measurement weights</td>
<td>10</td>
<td>12.133</td>
<td>.276</td>
<td>.003</td>
<td>.003</td>
<td>-.006</td>
<td>-.006</td>
</tr>
<tr>
<td>Structural covariances</td>
<td>16</td>
<td>19.025</td>
<td>.267</td>
<td>.004</td>
<td>.004</td>
<td>-.010</td>
<td>-.010</td>
</tr>
</tbody>
</table>


Figure 3.6. Measurement model of work engagement
Harmon’s Single Factor Test

When the measurements for testing all variables are self-reported at the individual level, common method biases may occur. Harmon’s single factor Test was conducted to examine common method variances (CMV) in this study. The variances extracted for the largest un-rotated component was 35.50%, which falls below the 50 % suggested threshold (Podsakoff, MacKenzie, Podsakoff, & Lee, 2003).

Alpha Coefficient Test

Cronbach’s Alpha is adopted for reliability calculation of this study. To reach strong item covariance and capture the sampling domain, the coefficient alpha 0.70 is referenced for a satisfactory standard. Nunnally (1978) suggested that all variables should reach a Cronbach’s alpha of 0.70. All variables are within a good range, the reliability value of each variable reached the score around 0.75 to 0.95. Table 3.12 summarized the alpha values for each variable.

Table 3.12.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach’s Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquiescent Silence</td>
<td>0.80</td>
</tr>
<tr>
<td>Defensive Silence</td>
<td>0.79</td>
</tr>
<tr>
<td>Pro-social Silence</td>
<td>0.81</td>
</tr>
<tr>
<td>Opportunistic Silence</td>
<td>0.75</td>
</tr>
<tr>
<td>Employee Well-Being</td>
<td>0.88</td>
</tr>
<tr>
<td>Mentoring Relationship</td>
<td>0.95</td>
</tr>
<tr>
<td>Work Engagement</td>
<td>0.93</td>
</tr>
</tbody>
</table>
CHAPTER IV  FINDINGS AND DISCUSSION

Sample Profile

Data of the present study were collected from 435 participants. Descriptive statistics showed that the demographic variables included (1) gender, (2) age, (3) education level, (4) hierarchical level (5) tenure and (6) organizational scale in this study. Among the respondents ($N = 435$), almost 57% were female employees and 43% were male. In terms of age, the majority were in their 20s (55%) and 30s (32%). As for the educational level, 73% of the respondents had bachelor’s degree and 23% from graduate school. In terms of hierarchical level, 83% of the respondents were in general staffs, 12.4% were in lower supervisory positions and 4.6% were higher than middle managerial level. The tenure of employees was distributed across the following categories: below 5 years (56%), 5-10 years (21%), 10-20 years (18%), 20-30 years (4%) and over 30 years (1%). The organizational scale also divided into different sizes, 67% were worked in middle-size organizations (below 500 employees), 15.2% worked in large organizations (500–3,000 employees), and 17.9% worked in very large organizations (more than 3,000 employees).

Table 4.1. 
Descriptive Statistics on Sample Characteristics ($N = 435$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Categories</th>
<th>Count</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18-25</td>
<td>107</td>
<td>24.6</td>
</tr>
<tr>
<td></td>
<td>26-30</td>
<td>132</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>31-35</td>
<td>80</td>
<td>18.4</td>
</tr>
<tr>
<td></td>
<td>36-40</td>
<td>62</td>
<td>14.3</td>
</tr>
<tr>
<td></td>
<td>41-45</td>
<td>27</td>
<td>6.2</td>
</tr>
<tr>
<td></td>
<td>46-50</td>
<td>10</td>
<td>2.3</td>
</tr>
<tr>
<td></td>
<td>More than 50</td>
<td>17</td>
<td>3.9</td>
</tr>
<tr>
<td>Gender</td>
<td>Male</td>
<td>188</td>
<td>43.2</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>247</td>
<td>56.8</td>
</tr>
</tbody>
</table>

(continued)
<table>
<thead>
<tr>
<th>Hierarchical level</th>
<th>General Staff</th>
<th>361</th>
<th>83.0</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Line Manager</td>
<td>54</td>
<td>12.4</td>
</tr>
<tr>
<td></td>
<td>Middle Manager</td>
<td>16</td>
<td>3.7</td>
</tr>
<tr>
<td></td>
<td>Higher Manager</td>
<td>4</td>
<td>1.0</td>
</tr>
<tr>
<td>Level of education</td>
<td>Associate Degree</td>
<td>20</td>
<td>4.6</td>
</tr>
<tr>
<td></td>
<td>Bachelor’s Degree</td>
<td>316</td>
<td>72.6</td>
</tr>
<tr>
<td></td>
<td>Master’s Degree</td>
<td>92</td>
<td>21.1</td>
</tr>
<tr>
<td></td>
<td>Doctorate Degree</td>
<td>7</td>
<td>1.6</td>
</tr>
<tr>
<td>Tenure in current job position</td>
<td>Below 5</td>
<td>244</td>
<td>56.1</td>
</tr>
<tr>
<td></td>
<td>5-10</td>
<td>91</td>
<td>20.9</td>
</tr>
<tr>
<td></td>
<td>10-20</td>
<td>79</td>
<td>18.1</td>
</tr>
<tr>
<td></td>
<td>20-30</td>
<td>17</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>More than 30</td>
<td>4</td>
<td>0.9</td>
</tr>
<tr>
<td>Company Scale</td>
<td>Below 300</td>
<td>252</td>
<td>58</td>
</tr>
<tr>
<td></td>
<td>300-500</td>
<td>39</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>500-2000</td>
<td>49</td>
<td>11.3</td>
</tr>
<tr>
<td></td>
<td>2000-3000</td>
<td>17</td>
<td>3.9</td>
</tr>
<tr>
<td></td>
<td>More than 3000</td>
<td>78</td>
<td>17.9</td>
</tr>
</tbody>
</table>
Pearson’s Correlation Analysis

Correlation analysis is conducted in order to examine and investigate the direct correlations (or relationship) between variables, and it is used to measure the strength of relationships between two continuous variables (Gray & Kinnear, 2012). By doing so, the effects of independent variables on dependent variables can be tested, verifying whether they are positively or negatively correlated with each other. The correlation analysis of this study is performed by IBM SPSS 23.0. When correlation values are above 0.75 (Vernon & Mior, 1991), it may imply the existence of multicollinearity between the tested variables. When the correlation is high, it represents that there is a strong relationship between two variables. The figure of correlation should between 1 and -1.

The result of correlation provides initial test of the relationships among different variables. The result demonstrated that Work Engagement was negatively correlated with Acquiescent Silence \( (r = -0.23, p < .001) \), Defensive Silence \( (r = -0.19, p < .01) \), and Opportunistic Silence \( (r = -0.15, p < .01) \). On the other hand, work engagement was positively correlated with Mentoring Relationship \( (r = 0.65, p < .01) \) and Employee Well-Being \( (r = 0.77, p < .01) \). These results showed preliminary directions and correlations are consistency with hypothesis. Moreover, both tenure and position level also demonstrated positive and significant relationship with work engagement. (Tenure: \( r = 0.14, p < .01 \); Position Level: \( r = 0.21, p < .01 \)). All variables’ number, means, standard deviations, reliability analysis and correlations were showed in Table 4.2., please refer to it for more details.
Table 4. 2.

Mean, Standard Deviations, Correlations, and Reliability (N=435)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>SD</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
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<td>.49</td>
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<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>2. Position level</td>
<td>1.2</td>
<td>.55</td>
<td>-.09</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Tenure</td>
<td>3.7</td>
<td>2.10</td>
<td>-.003</td>
<td>.35**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Acquiescent Silence</td>
<td>3.1</td>
<td>1.04</td>
<td>.03</td>
<td>.06</td>
<td>.18**</td>
<td>(0.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Defensive Silence</td>
<td>3.2</td>
<td>.99</td>
<td>-.01</td>
<td>-.03</td>
<td>-.06</td>
<td>.61**</td>
<td>(0.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Pro-social Silence</td>
<td>3.3</td>
<td>.95</td>
<td>-.03</td>
<td>.03</td>
<td>.06</td>
<td>.55**</td>
<td>.70**</td>
<td>(0.8)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Opportunistic Silence</td>
<td>2.8</td>
<td>.96</td>
<td>.09</td>
<td>.01</td>
<td>-.004</td>
<td>.60**</td>
<td>.67**</td>
<td>.57**</td>
<td>(0.7)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Employee Well-Being</td>
<td>3.3</td>
<td>.73</td>
<td>-.04</td>
<td>.08</td>
<td>-.04</td>
<td>-.44**</td>
<td>-.28**</td>
<td>-.18**</td>
<td>-.23**</td>
<td>(0.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Mentoring Relationship</td>
<td>4.3</td>
<td>1.3</td>
<td>-.01</td>
<td>.06</td>
<td>-.06</td>
<td>-.36**</td>
<td>-.19**</td>
<td>-.14**</td>
<td>-.16**</td>
<td>.67**</td>
<td>(0.9)</td>
<td></td>
</tr>
<tr>
<td>10. Work Engagement</td>
<td>4.3</td>
<td>1.2</td>
<td>-.02</td>
<td>.21**</td>
<td>.14**</td>
<td>-.23**</td>
<td>-.19**</td>
<td>-.07</td>
<td>-.15**</td>
<td>.77**</td>
<td>.65**</td>
<td>(0.9)</td>
</tr>
</tbody>
</table>

Note. Number in the brackets represent the Cronbach’s Alpha value of the variables. *p < .05 **p < .01 ***p < .001. Gender: 1 = Male, 0 = Female; Position level: 1 = General Staff, 2 = Line Manager, 3 = Middle Manager, 4 = High Manager; Tenure: 1 = 0–1 year, 2 = 1–3 years, 3 = 3–5 years, 4 = 5–7 years, 5 = 7–10 years, 6 = 10–15 years, 7 = 15–20 years, 8 = 20–25 years, 9 = 25–30 years and 10 = above 30 years
Path Analysis in Structural Equation Modeling

Hypotheses were tested using path analysis in SEM (Gefen, Straub, & Boudreau, 2000) to examine the casual relationships and mediation effect among all the variables in this study. This approach was employed to create a path model and to analyze the structural relationship among the variables between different types of employee silences, employee well-being, and work engagement. Refer to Figure 4.1. for path model of work engagement as the dependent variable and employee well-being as the mediating variable.

![Path model diagram](image_url)

**Figure 4.1.** Path model of work engagement as the dependent variable and employee well-being as the mediating variable ($N = 435$).

Because the model is complex, all the relative fit indices are a little bit lower than the suggested value of above .90. The other fit indices of the model are within the acceptable range. Refer to the results summarized in Table 4.3.
Table 4.3.

Summary of Goodness of Fit for Path Model of Work Engagement as the Dependent Variable and Employee Well-Being as the Mediating Variable (N = 435)

<table>
<thead>
<tr>
<th></th>
<th>$\chi^2$</th>
<th>df</th>
<th>$\chi^2$/df</th>
<th>RMSEA</th>
<th>CFI</th>
<th>NFI</th>
<th>IFI</th>
<th>TLI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1722.769</td>
<td>512</td>
<td>3.36</td>
<td>.074</td>
<td>.875</td>
<td>.833</td>
<td>.876</td>
<td>.855</td>
</tr>
</tbody>
</table>

The model demonstrated that Acquiescent, Defensive, Pro-social and Opportunistic Silences had significant direct effects on employee well-being. Specifically, Acquiescent silence had a significant negative effect on employee well-being (path coefficient = -.63, $p < .001$). Therefore, hypothesis 1a was confirmed. It was also found that Defensive Silence had a significant negative influence on employee well-being (path coefficient = -.40, $p < .05$). Hence, hypothesis 1b was confirmed. Pro-social silence had a significant positive effect on employee well-being (path coefficient = .35, $p < .05$). Hence, hypothesis 1c was confirmed. Lastly, Opportunistic silence had a significant positive effect on employee well-being (path coefficient = .33, $p < .05$). Hence, hypothesis 1d was not confirmed. Refer to Table 4.3 for the results of direct, indirect and total effects of variables on work engagement.

Refer to Table 4.4 for the direct and indirect effects of studied variables on work engagement, which shows all types of silence have a significant direct effect on work engagement. Furthermore, indirect effect was calculated by multiplying the direct effect from different types of employee silences to employee wellbeing and the direct effect from employee well-being to work engagement.

Table 4.4.

Direct and Indirect Effects of Variables on Work Engagement

<table>
<thead>
<tr>
<th></th>
<th>Acquiescent Silence</th>
<th>Defensive Silence</th>
<th>Pro-social Silence</th>
<th>Opportunistic Silence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct Effect</td>
<td>.25***</td>
<td>-.17**</td>
<td>.12**</td>
<td>-.09**</td>
</tr>
<tr>
<td>Indirect Effect</td>
<td>-.59</td>
<td>-.38</td>
<td>.33</td>
<td>.31</td>
</tr>
<tr>
<td>Total Effect</td>
<td>-.34</td>
<td>-.54</td>
<td>.45</td>
<td>.22</td>
</tr>
</tbody>
</table>
Sobel Test

Sobel (1982) developed a formula to examine how the mediator carries the influence of the independent variable to the dependent variable, drawing upon the critical value of 1.96, to determine whether the results are supportive of mediation. Sobel test was used to determine whether significant indirect effects exist between Acquiescent, Defensive, Pro-social, Opportunistic Silences and work engagement (DV), when controlling for the mediator of employee well-being.

Results suggest that the relationship between acquiescent silence and work engagement is significantly mediated by employee well-being ($z' = -5.03$, $p < 0.01$). Secondly, defensive silence and work engagement is significantly mediated by employee well-being ($z' = -1.96$, $p < 0.05$). Thirdly, the results indicated that employee well-being has a significant mediation effect between pro-social silence and work engagement ($z' = 2.69$, $p < 0.01$). Lastly, the relationship between Opportunistic Silence and work engagement is also mediated by employee well-being ($z' = 2.27$, $p < 0.05$). Furthermore, this research applied the variance accounted for (VAF) value (Latan & Noonan, 2017, pp.179) to test whether the mediator has a full or partial mediation effect. When the indirect effect divided by direct effect is over 80%, it represents a full mediation. After testing by VAF value, Acquiescent, Defensive and Opportunistic silences showed full mediation effects, however, Pro-social silence showed a partial mediation effect.

In summary, Acquiescent, Defensive, Pro-social and Opportunistic Silences exerted a greater total effect to work engagement with indirect effects mediated through employee well-being. Therefore, it confirmed that there were mediation effects through employee well-being in the relationships between Acquiescent, Defensive, Pro-social, Opportunistic Silences and work engagement. Hence, hypotheses 3a, 3b, 3c and 3d were supported. Refer to Table 4.4. for the results of direct, indirect and total effects of variables on work engagement.
Hierarchical Regression

This analysis is used when there are two or more independent variables; and the purpose of this regression technique is applied to test causation (Gray & Kinnear, 2012). In this study, the researcher runs hierarchical regression to analyze the direction and effect between the variables of employee silence, employee well-being, work engagement, mentoring relationship, and control variables. Hierarchical regression investigates the results according to the influence of phenomena at different levels analysis by providing a conceptual and statistical mechanism (Hofmann, 1997). Another advantage is Hierarchical regression is able to investigate relationship within a certain hierarchical level and also investigate relationships across or between hierarchical levels at the same time (Bryk & Raudenbush, 1992).

The regression result of all hypotheses was presented in Table 4.5. Model 1 and 2 demonstrated that Acquiescent and Defensive Silence were significantly and negatively related to work engagement ($\beta = -0.26, p < 0.001; \beta = -0.18, p < 0.001$), and also demonstrated that Opportunistic Silence was significantly and negatively related to work engagement ($\beta = -0.16, p < 0.001$). Accordingly, H2a, H2b and H2d were fully supported. However, Model 3 demonstrated there was no significant relationship between Pro-social Silence and Work Engagement, so H2c was not supported.

This analysis was used to examine the moderating effect of mentoring relationship between different types of employee silences and work engagement. Control variables considered for this analysis were Tenure and Position Level. Refer to Table 4.6., the $R^2$ increased from Model 1 to Model 3, which all represented that mentoring relationship positively moderated the impacts of, Acquiescent, Defensive Silence, Prosocial Silence and Opportunistic Silence on work engagement. However, from the results showed in Model 3, which demonstrated that only the interaction of (OS X ME) has positively and significant ($\beta = 0.22, p < 0.001$) effect on work engagement. Refer to Figure 4.2. for further drawing the interaction plots to check the moderating effect.
Table 4.5.
*Result of Regression Analysis for Different Types of Employee Silences as Independent Variable (N = 435)*

<table>
<thead>
<tr>
<th>Variables</th>
<th>Work Engagement</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Model 1</td>
<td>Model 2</td>
<td>Model 3</td>
<td>Model 4</td>
<td></td>
</tr>
<tr>
<td>Controls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position Level</td>
<td>.108***</td>
<td>.184***</td>
<td>.112**</td>
<td>.189***</td>
<td></td>
</tr>
<tr>
<td>Tenure</td>
<td>.029*</td>
<td>.049</td>
<td>.063</td>
<td>.057</td>
<td></td>
</tr>
<tr>
<td>Main Effect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquiescent Silence</td>
<td>-.259***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Defensive Silence</td>
<td>-.175***</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Prosocial Silence</td>
<td>-.078</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Opportunistic Silence</td>
<td></td>
<td>-.155***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>18.368***</td>
<td>12.259***</td>
<td>8.229</td>
<td>11.167***</td>
<td></td>
</tr>
<tr>
<td>R²</td>
<td>.113</td>
<td>.079</td>
<td>.054</td>
<td>.072</td>
<td></td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.107</td>
<td>.072</td>
<td>.048</td>
<td>.066</td>
<td></td>
</tr>
<tr>
<td>ΔR²</td>
<td>.065***</td>
<td>.030***</td>
<td>.006</td>
<td>.024***</td>
<td></td>
</tr>
</tbody>
</table>

*Notes: *p < 0.05. **p < 0.01. ***p < 0.001.*
Table 4. 6.
Result of Regression Analysis for Moderating Effect of Mentoring Relationship (N = 435)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Controls</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Position Level</td>
<td>.183***</td>
<td>.122**</td>
<td>.120**</td>
</tr>
<tr>
<td>Tenure</td>
<td>.073</td>
<td>.124**</td>
<td>.125**</td>
</tr>
<tr>
<td><strong>Main Effect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquiescent Silence</td>
<td>.004</td>
<td></td>
<td>-.038</td>
</tr>
<tr>
<td>Defensive Silence</td>
<td>-.082</td>
<td>-.062</td>
<td></td>
</tr>
<tr>
<td>Prosocial Silence</td>
<td>.094</td>
<td>.105*</td>
<td></td>
</tr>
<tr>
<td>Opportunistic Silence</td>
<td>-.054</td>
<td>-.058</td>
<td></td>
</tr>
<tr>
<td>Mentoring Relationship</td>
<td>.639***</td>
<td>.639***</td>
<td></td>
</tr>
<tr>
<td><strong>Interaction Effect</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AS X ME</td>
<td></td>
<td>-.030</td>
<td></td>
</tr>
<tr>
<td>DS X ME</td>
<td></td>
<td>-.048</td>
<td></td>
</tr>
<tr>
<td>PS X ME</td>
<td></td>
<td>-.083</td>
<td></td>
</tr>
<tr>
<td>OS X ME</td>
<td></td>
<td>.216***</td>
<td></td>
</tr>
<tr>
<td><strong>F</strong></td>
<td>10.936***</td>
<td>54.653***</td>
<td>36.822***</td>
</tr>
<tr>
<td><strong>R^2</strong></td>
<td>.048</td>
<td>.473</td>
<td>.489</td>
</tr>
<tr>
<td><strong>Adjusted R^2</strong></td>
<td>.044</td>
<td>.476</td>
<td>.476</td>
</tr>
<tr>
<td><strong>ΔR^2</strong></td>
<td>.048***</td>
<td>.424***</td>
<td>.017***</td>
</tr>
</tbody>
</table>

*Note. *p < 0.05. **p < 0.01. ***p < 0.001.*
The interaction plot for the moderating effect of mentoring on the impacts of opportunistic silence and work engagement is presented in Figure 4.2. According to Aiken, West and Reno (1991) approach, first, the researcher recoded the moderator variable to a new categorical variable which stands for Low (1), Medium (2), High (3) mentoring. For example, low mentoring group means mentoring scores -1 SD, that is, everyone who scores below the number of “mean minus 1 SD”. On the other hand, high mentoring group means mentoring scores +1 SD, that is, everyone who scores above the number of “mean plus 1 SD”.

The low mentoring (solid line) group shows a strong negative relationship between opportunistic silence and work engagement, which means the group of employees who perceived weak mentoring relationship exhibit stronger negative relationship between opportunistic silence and work engagement. So, employees who had high opportunistic silence behavior will have low work engagement in low mentoring group. Conversely, the high mentoring (short-dash line) group has a weaker negative relationship between opportunistic silence and work engagement. That is, for the group of employees who perceived strong mentoring relationship, the negative effect of opportunistic silence on work engagement is almost non-existent. Therefore, employees who exhibit high opportunistic silence behavior can still have high work engagement in high mentoring group.
Figure 4.2. Interaction plot for the moderating effect of mentoring relationship on opportunistic silence and work engagement.
Summary of Analysis Results

By investigating the influence of Acquiescent Silence, Defensive Silence, Prosocial Silence and Opportunistic Silence on work engagement. Also, whether employee well-being have mediating effect and mentoring relationship moderated the variables. This research aimed to provide more information for organization and researcher to understand silence situation in company. Additionally, this research aimed to further explore whether mentoring relationship would serve as a moderator on the influence of different types of employee silence on work engagement. Hypotheses were thereby generated to verify the relationships among variables, several statistical techniques were applied during the data analyzing process.

Firstly, the Pearson Correlation Analysis was performed for preliminary examining the correlations and directions between variables. The demographic variables as position level and tenure have positive and significant effect on work engagement. Secondly, Structural Equation Modeling was performed for examining the mediating effect of employee well-being between different types of employee silences and work engagement. The result indicated that four different types of employee silences exerted a greater total effect to work engagement with indirect effects mediated through employee well-being. Furthermore, the result indicated that Acquiescent Silence, Defensive Silence and Opportunistic Silence on employee well-being were significantly negative and Prosocial Silence were significantly positive. Thirdly, a Multiple Regression Analysis was performed for testing the hypotheses and examine the moderating effect of mentoring relationship. The result demonstrated that mentoring relationship significantly moderates the relationship between Opportunistic silences and work engagement. Hence, H1a, H1b, H1c, H2a, H2b, H2d, H3a, H3b, H3c, H3d, and H4d were supported. Summary of the results of hypotheses is shown in Table 4.7.
Table 4. 7.

*Hypothesis Testing Results Summary*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hypothesis 1a</strong>: Acquiescent Silence will have a negative effect on employee well-being in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 1b</strong>: Defensive Silence will have a negative effect on employee well-being in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 1c</strong>: Pro-social Silence will have a positive effect on employee well-being in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 1d</strong>: Opportunistic Silence will have a negative effect on employee well-being in organization.</td>
<td>NOT Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 2a</strong>: Acquiescent Silence will have a negative effect on work engagement in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 2b</strong>: Defensive Silence will have a negative effect on work engagement in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 2c</strong>: Pro-social Silence will have a positive effect on work engagement in organization.</td>
<td>NOT Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 2d</strong>: Opportunistic Silence will have a negative effect on work engagement in organization.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 3a</strong>: Employee well-being has a mediating effect on the relationship between Acquiescent Silence and work engagement.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 3b</strong>: Employee well-being has a mediating effect on the relationship between Defensive Silence and work engagement.</td>
<td>Supported</td>
</tr>
<tr>
<td><strong>Hypothesis 3c</strong>: Employee well-being s has a mediating effect on the relationship between Pro-social Silence and work engagement.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
**Hypothesis 3d:** Employee well-being has a mediating effect on the relationship between Opportunistic Silence and work engagement.  

**Supported**

**Hypothesis 4a:** The mentoring relationship will weaken the relationship between Acquiescent Silence and work engagement.  

**NOT Supported**

**Hypothesis 4b:** The mentoring relationship will weaken the relationship between Defensive Silence and work engagement.  

**NOT Supported**

**Hypothesis 4c:** The mentoring relationship will weaken the relationship between Pro-social Silence and work engagement.  

**NOT Supported**

**Hypothesis 4d:** The mentoring relationship will weaken the relationship between Opportunistic Silence and work engagement.  

**Supported**
CHAPTER V CONCLUSIONS AND SUGGESTIONS

This chapter presents the conclusions and suggestions based on results obtained from the data analysis, concerns of the research limitations, and also lists some recommendations for future research.

Conclusions and Discussion

The aim of this research is intended to investigate the organizational behavior among different types of employee silences, employee well-being, mentoring relationship and work engagement. The results of these primary hypothesis had led to several important conclusions in this study. First, the results indicated that different types of employee silences will not have the same effect on work engagement. This finding is similar to the ideas offered by Van Dyne et al. (2003) who had proposed that silence is not only passive but intentional behavior which might have different results. In order to understand the relationship between silence behavior and work engagement, employee well-being was discussed to have mediating effect which is an important factor between silence and engagement. Furthermore, mentoring relationship was also discussed as moderator to influence silence and engagement behavior. Both the mediator and the moderator were seen as the improvement factors among employees and organizations.

After the statistical analysis was performed, different types of employee silences have been confirmed to not show the same effect on work engagement, depending on various reasons resulting in different effect on working conditions. Take acquiescent, defensive and opportunistic silences for example, employees who have these types of silence behavior will have bad influence on their performances or psychological conditions. However, employees who have pro-social silence behavior which means they consider others’ needs more will help them to have positive influence on engagement and well-being. In general, organization will have four types of employee silence behaviors at the same time.

Furthermore, employee well-being was proved to have significant mediating effect (full or partial) from different types of employee silence to work engagement. This means when employees’ well-being (e.g., psychological conditions or job satisfaction) is taken care of, they will be more engaged in their work. Also, statistical analysis results showed that employee well-being has a full mediating effect between acquiescent, defensive, opportunistic silence and work engagement, while having only a partial mediating effect
between pro-silence silence and work engagement. According to the result, pro-social silence was the only one that has a positive effect on work engagement.

On the other hand, mentoring relationship was found to have significant moderating effect on the relationship among different types of employee silence and work engagement. In the research, samples are all perceived to have mentoring support in organization. However, there are no significant moderating effect on most types of silence behavior and work engagement by mentoring relationship. There was only one significant interaction effect between opportunistic silence and work engagement by mentoring relationship. The definition of opportunistic silence was “employees who wanted to protect their knowledge advantages.”, which means this group of employees are good at finding their way up the career ladder. When these employees perceive higher mentoring support, which means the mentor is watching their performance more closely, this may make them more engaged at work than those employees who exhibit other types of silence behavior.

In the organization, when employees intentionally withheld information related to workplace, it will have great impact on the improvement of organization (Van Dyne et al., 2003). The phenomenon may partly result from top management because silence behavior is systemic in many workplaces (Morrison & Milliken, 2000). In this research, it shows that employee silence behavior has significant effect on employees’ work conditions, such as well-being and engagement which are important factors to influence work-related performances. In order to reduce negative consequences, organizations should put more attentions on employees’ silence behavior to provide better working life.
Practical Implications

This research investigated organizational behavior and mostly focus on employees’ feelings in organization, such as employee silences, employee well-being, work engagement and mentoring relationship. It shed the light on deepening the issues of working conditions and problems which will be faced by employees in a company. The results may contribute to many individuals in organizations, such as managers, employees, mentors, HR personnel and others.

Firstly, this research helps the managerial level gain more knowledge about specific types of silence situations and also help avoid negative silence consequences in organizations. After understanding more ideas about specific types of employee silence behavior, organizations can be more considerate about employees’ conditions to understand why employees have these behaviors. In order to reduce these situations, it could help organizations to upgrade the working environment, organizational climate, policies, compensations and psychological care of employees. Furthermore, it helps organizations get more knowledge about mentoring relationship, specifically how it works for different types of employee silences to help organizations make good plans for better mentoring programs.

Secondly, for general employees, this research help employees understand more about what they are going through and the typical situations they are suffering in organization, which could help employees avoid silence situations and not being negative in organization. Furthermore, the implication to mentors is to provide more information about silence behavior, which could help mentors figure out better solutions or ideas for helping employees. The good cooperation between employees and mentors was found to slightly influence the silence behavior in organization, which means good mentoring program and relationship is important for organizational effectiveness.

Lastly, according to the supportive role of HR, one of the responsibility is to balance the relationship between the organization and employees. This research provides the ideas about the relationship among different types of employee silence to employees’ well-being and engagement, which helps HR make plans to become a bridge to solve these problems. For example, HR can categorize specific types of employees and design customized programs and policies to directly solve problems. Also, HR can gain more knowledge about the importance of reducing silence behaviors to enhance employee well-being and work
engagement in organizations, which could also help HR successfully demonstrate their value.

**Research Implications**

This study provides valuable research implications since it points out empirical information about specific types of employee silence behavior which are rarely researched in Taiwan. Although little research has discussed about related topic, silence behavior frequently happens in daily working life. This research helps to draw more attentions to the fact that different types of employee silence behavior will cause positive or negative effects on work-related situations, such as employee well-being and work engagement. The construct of employee silence was mostly seen as negative factors to influence performances and development of organization, thus the relationship of different types of employee silences and work performances was rarely associated in discussions. This research benefits researchers who are interested in investigating silence behavior and other variables related to this topic, such as the field of organizational behavior and business management research. Furthermore, the specific types of employee silence represents different reasons and causes of work-related situations. Depending on each typical situation, a researcher can connect these silence behaviors with other related working variables. This research provides empirical relationships among different types of employee silences and working behavior to broaden the issues of silence behavior in organization. Thus, this research serves as a small step to advance the discussion on the effect of specific types of employee silence to employee well-being and work engagement, as well as the importance of mentoring relationship in organization.

**Research Limitations**

Because the independent variables are different types of employee silence, which represent the negative behavior of employees, some respondents might feel reluctant to report the true level when they filled out the questionnaire. Another limitation is that little literature was conducted to analyze specific types of employee silence. Therefore, it is difficult to develop research hypothesis based on strong theoretical argument. Moreover, one of the sample criteria was having mentoring relationship in the organization, which already screened out many respondents in data collection process, so the sample size was limited in this research.
Future Research Suggestions

Besides a quantitative research approach by analyzing data to conclude the results, future researchers could use qualitative research, such as face to face interview, to collect more information about employee silence behavior. In this research, the sample are not limited for specific industries and mostly are general staff. However, the phenomenon may change in different industries or for different positions. Researchers are suggested to investigate and compare employee silence behavior across different industries and positions. In addition, employee silence behavior is assumed to have negative relationship with many outcomes. However, if researchers could make assumptions about employee silence having positive relationship with other related variables, such as a better leader-member exchange relationship (Wang, Zhang, Ding, & Cheng, 2018) this will make the research more interesting. Moreover, the mentoring relationship could be divided into different types of supporting functions. Future researchers can also examine the relationship among different types of mentoring relationships and other related variables. It will be more valuable for company, HR and researcher to have more knowledge of this specific field.
REFERENCES


Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research, 18*(3), 382-388.


Inquiry, 9(1),1 - 28.


APPENDIX A:

QUESTIONNAIRE IN ENGLISH AND CHINESE
Study on Organizational Behavior in Taiwan

Dear Participants:

The questionnaire may take you 10 to 15 minutes to finish. Please kindly review each item and answer it according to your real perceptions. To ensure anonymity, please do not include your name or any other identifications. It is very important that you respond to each statement. Only then can we include your opinion into the final analysis. Please feel free to contact me at m19940509@gmail.com, if you have any questions or comments. Thank you very much for your participation!

本問卷將需要您花 10~15 分鐘的時間完成，希望您能根據自己真實的想法來回答每個問題。為確保問卷以匿名方式作答，請勿留下任何名字或特殊標記。

認真答題對於本研究相當重要，我們會將您的意見都全部採用並分析結果，如答題上或對於本研究有任何疑問，非常歡迎您來信。感謝您的熱情參與以及對本研究的支持！

Graduate Institute of International Human Resource Development
National Taiwan Normal University
Research Advisor: Chu-Chen Rosa Yeh Ph.D.
Research Practitioner: Han-Yu Tsai

Screening Question:

1. Are you currently working in over thirty employee’s company? 
   您目前在員工數 30 人以上的公司任職嗎？
   □ Yes (Please continue the questionnaire)
   □ NO (Thank you for participate)

2. Do you currently have mentoring relationship? 
   在近期的三個月裡,你有導師在引導你工作嗎？
   □ Yes (Please continue the questionnaire)
   □ NO (Thank you for participate)
Employee Silence

The following 20 statements complete the item root “Sometimes I remain silent at work...” which are about employee’s silence behavior in organization. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the ‘1’ (one) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 5) that best describes how frequently you feel that way.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
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<td>1. I remained silent at work to avoid conflicts. 我在工作中保持沉默去避免冲突</td>
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<td>2. I remained silent at work because of bad experience I’ve had with speaking up on critical in the past. 我在工作中保持沉默,由於過去對重要議題建言所導致的不好的經驗</td>
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<td>3. I remained silent at work because it is not expected from me to get involved. 我在工作中保持沉默,由於我不被期待加入</td>
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<td>4. I remained silent at work because of fear of negative consequences. (QS) 我在工作中保持沉默,由於害怕負面的結果</td>
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<td>5. I remained silent at work to not make me vulnerable in the face of colleagues or supervisors. (QS) 我在工作中保持沉默,為了不在同事及主管面前表現出弱點</td>
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<td>6. I remained silent at work because I do not want to embarrass others. (PS) 我在工作中保持沉默,因為我不想讓他人尷尬</td>
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<td>7. I remained silent at work because I do not want to hurt the feelings of colleagues or supervisors. (PS) 我在工作中保持沉默，因為我不想傷害同事或主管的感受。</td>
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<td>8. I remained silent at work because I didn’t want to damage relationships to colleagues or supervisors. 我在工作中保持沉默,由於我不想损害與同事及主管間的關係</td>
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<td>9. I remained silent at work because I didn’t want to be viewed as troublemaker. 我在工作中保持沉默,由於我不想被視為問題人物</td>
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<td>10.</td>
<td>I remained silent at work because I will not find a sympathetic ear. (AS) 我在工作中保持沉默，因為並沒有找到願意傾聽的人</td>
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<td>11.</td>
<td>I remained silent at work because nothing will change. (AS) 我在工作中保持沉默，因為不會有任何改變</td>
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<td>12.</td>
<td>I remained silent at work because others say nothing, too. 我在工作中保持沉默，因為其他人同樣也是</td>
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<td>13.</td>
<td>I remained silent at work because my supervisors are not open to proposals, concerns. (AS) 我在工作中保持沉默，因為主管對提案和想法並不開放</td>
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<td>14.</td>
<td>I remained silent at work because my supervisors do not deserve my involvement. 我在工作中保持沉默，由於我的上司不值得我投入</td>
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<td>15.</td>
<td>I remained silent at work because that would mean having to do avoidable additional work.* * 我在工作中保持沉默，因為代表著必須去做可避免的額外工作</td>
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<td>16.</td>
<td>I remained silent at work because I do not want others to get into trouble. (PS) 我在工作中保持沉默，因為我不想其他人有麻煩</td>
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<td>17.</td>
<td>I remained silent at work because of concerns that others could take an advantage of my ideas. 我在工作中保持沉默，由於擔心其他人會從我的想法中得到好處</td>
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<td>18.</td>
<td>I remained silent at work because I wanted others to experience the effects from theirs mistakes. 我在工作中保持沉默，因為我想讓他人從自己的過錯中有所體會</td>
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<td>19.</td>
<td>I remained silent at work because I fear disadvantage from speaking up. (QS) 我在工作中保持沉默，因為我害怕建言後所產生的不利</td>
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<td>20.</td>
<td>I remained silent at work to not give away my knowledge advantage. 我在工作中保持沉默，為了不放棄我的知識優勢</td>
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### Employee Well-Being

This questionnaire is designed to assess your quality of working life. Please do not take too long over each question; we want your first reaction not a long drawn out thought process. Please do not omit any questions. This isn’t a test, simply a measure of your attitudes to the factors that influence your experience at work.

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<tr>
<th>Strongly Disagree</th>
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<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
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#### General Well-Being

21. I feel well at the moment
22. Recently, I have been feeling unhappy and depressed
23. I am satisfied with my life
24. In most ways my life is close to ideal
25. Generally things work out well for me

#### Job Career Satisfaction

26. I have a clear set of goals and aims to enable me to do my job
27. I have the opportunity to use my abilities at work
28. When I have done a good job it is acknowledged by my line manager
29. I am encouraged to develop new skills
30. I am satisfied with the career opportunities available for me here
31. I am satisfied with the training I receive in order to perform my present job
Work Engagement

The following 17 statements are about how you feel at work. Please read each statement carefully and decide if you ever feel this way about your job. If you have never had this feeling, cross the ‘1’ (one) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 7) that best describes how frequently you feel that way.

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<thead>
<tr>
<th>Strongly disagree</th>
<th>Somewhat disagree</th>
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32. At my work, I feel bursting with energy.*
   (VI)  在工作中，我感到自己迸发出能量

33. I find the work that I do full of meaning and purpose.
   (DE)  我觉得我所从事的工作目的明确，且很有意义

34. Time flies when I’m working.
   (AB)  當我工作時，時間總是過得飛快

35. At my job, I feel strong and vigorous.
   (VI)  工作時，我感到自己強大並且充滿活力

36. I am enthusiastic about my job.
   (DE)  我對工作富有熱情

37. When I am working, I forget everything else around me.
   (AB)  我會投入到忘記周圍的一切事物

38. My job inspires me.
   (DE)  工作激發了我的靈感

39. When I get up in the morning, I feel like going to work.*
   (VI)  早上一起床，我就想要去工作

40. I feel happy when I am working intensely.
    (AB)  當工作節奏緊湊的時候，我會感到快樂

41. I am proud on the work that I do.*
    (DE)  我為自己所從事的工作感到自豪

42. I am immersed in my work.*
    (AB)  我沉浸於我的工作當中

43. I can continue working for very long periods at a time.
    (VI)  我可以一次連續工作很長時間

44. To me, my job is challenging.
    (DE)  對我來說，我的工作是具有挑戰性的

45. I get carried away when I’m working.
    (AB)  我在工作時會忘掉我自己的界線

46. At my job, I am very resilient, mentally.
    (VI)  工作時，即使感到疲憊，我也能盡快恢復

47. It is difficult to detach myself from my job.
    (AB)  我感覺到自己離不開工作
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<td>Neutral</td>
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48. At my work I always persevere, even when things do not go well.
在工作中，即使事情进展不顺利，我也总能坚持 (VI)

**Mentoring Relationship**

Please read each statement carefully and decide which is your currently perception about mentoring relationship. If you have never had this feeling, cross the ‘1’ (one) in the space after the statement. If you have had this feeling, indicate how often you feel it by crossing the number (from 1 to 7) that best describes how frequently you feel that way. Mentoring relationship refers to employees perceived mentor as someone who could be your guider, helper or consultant. For example, colleague, supervisors or any work-related relationship who could be helpful in your career.

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49. Mentor takes a personal interest in my career.

50. Mentor has placed me in important assignment.

51. Mentor gives me special coaching on the job.

52. Mentor advised me about promotional opportunities.

53. I share personal problems with mentor.

54. Mentor helps me coordinate professional goals.

55. I socialize with mentor after work.

56. I try to model my behavior after mentor.

57. I admire mentor’s ability to motivate others.

58. I exchange confidences with mentor.

59. I respect mentor’s knowledge of my profession.

60. I consider mentor to be a friend.

61. I respect mentor’s ability to teach others.
DEMOGRAPHIC INFORMATION

In this section, the answers will be confidentially protected. As your name will not be recorded, choosing on the real options that can best describe your current condition is highly encouraged. Thanks for your cooperation!

1. Gender： □Male □Female
2. Marital Status： □Single □Married
3. Age：
   □18~25 □26~30 □31~35 □36~40 □41 and above
4. Education：
   □Vocational High School
   □High School
   □Bachelor’s Degree
   □Master’s Degree
   □Advanced Graduate Work or Ph.D.
5. How long have you been working (Tenure)？
   □0~1 year
   □2 years ~ 3 years
   □4 years ~ 5 years
   □6 years ~ 7 years
   □8 years ~ 9 years
   □10 and above
6. Are you working in Family-Owned Companies?
   □Yes
   □NO
7. Which types of Family-Owned Companies are you working in?
   □International
   □Local

The questionnaire is completed. Thanks for your cooperation!