



**THE INFLUENCE OF SAVORING ON INNOVATIVE
BEHAVIOR OF UNIVERSITY TEACHERS: THE
MEDIATING EFFECT OF CREATIVE
SELF-EFFICACY AND AESTHETIC
EXPERIENCE**

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**A Dissertation Submitted in Partial Fulfillment of the Requirements
For the Degree of Doctor of Philosophy(Education Management)
Graduate School, China-ASEAN International College
Dhurakij Pundit University**

2019



Certificate of Acknowledgement of the Dissertation
China-ASEAN International College, Dhurakij Pundit University
Doctor of Philosophy Program in Education Management

Title of Dissertation The Influence of Savoring on Innovative Behavior of
University Teachers: The Mediating Effect of
Creative Self-Efficacy and Aesthetic Experience.

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Dissertation Title: The Influence of Savoring on Innovative Behavior of University
Teachers: The Mediating Effect of Creative Self-Efficacy and
Aesthetic Experience

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Program: Ph.D. (Education Management)

Academic Year: 2019

ABSTRACT

The purpose of this study is to explore the impact of university teachers' savoring on their innovative behavior, with creative self-efficacy and aesthetic experience as mediators, in Shandong Province, China. Through the use of questionnaires, 32 university teachers from Shandong Province of China were surveyed, and 822 valid questionnaires were collected and analyzed using structural equation modelling (SEM). The results of the study found that: First, the savoring of university teachers has no significant effect on innovative behaviors. second, the

savoring of university teachers affected creative self-efficacy in a positive way; third, the university teachers' savoring played a positive role in impacting aesthetic experience; fourth, innovative behavior was positively influenced by university teachers' creative self-efficacy; fifth, the university teachers' aesthetic experience had a positive effect on innovative behavior; sixth, the positive impact on self-efficacy by university teachers' aesthetic experience; seventh, university teachers' savoring exerted positive influence on innovative behavior through creative self-efficacy; and finally, university teachers' savoring positively affected innovative behavior through aesthetic experience.

Key words: savoring, innovative behavior, creative self-efficacy, aesthetic experience

ACKNOWLEDGEMENT

The process of writing this thesis is like a long, and sometimes painful, journey of constituting self-identity, from which both my brain and my heart are tempering. It gives me full preparation at the final stage of my study and get ready to embark the new life.

To take this opportunity, I would like to express my gratitude to my supervisor, Professor Yuan-Cheng Chang, who has given me encouragement and inspiring suggestion from the topic selection to revision. When I felt confused about my research subject, it is him who gave me timely guidance and encouragement. Over the years of my study, he gave me a numerous of helpful advice. He also gave me a platform to develop my specialty and academic ability. He taught me rigorous and realistic scientific research attitude, learning methods and problem-solving thinking, leading me into the palace of science. His profound knowledge, excellence attitudes, academic sensitivity, profound insights, as well as modest and honest demeanour give me a precious wealth in my life. I would like to express my deep respect and gratitude to him. Thanks to Professor Yuan-Cheng Chang for his selflessness to share materials, which are important sources of this thesis.

Thank you, Mr. Hugo Yu-Hsiu Lee, Mr. Jian-Hao Huang, Mr. Yi-Jian Huang, Miss. Chia Ching Tu and Mr. Ren-Cheng Zhang, for their attentive guidance on my thesis. I would like to express my heartfelt thanks to the authors of the references and quotations in this paper. My gratitude also gives to the respondents of questionnaires and investigation of this thesis, which provide me previous references.

Thanks to my classmates and friends, our daily arguments and discussion have always made me feel your creative thinking and broad sights, and encouraged me to focus on my writing.

Finally, thanks to my family for their long-term support and understanding!

In the future, I will bravely embark on a better journey with confidence and love.

Ling-Ke Kong

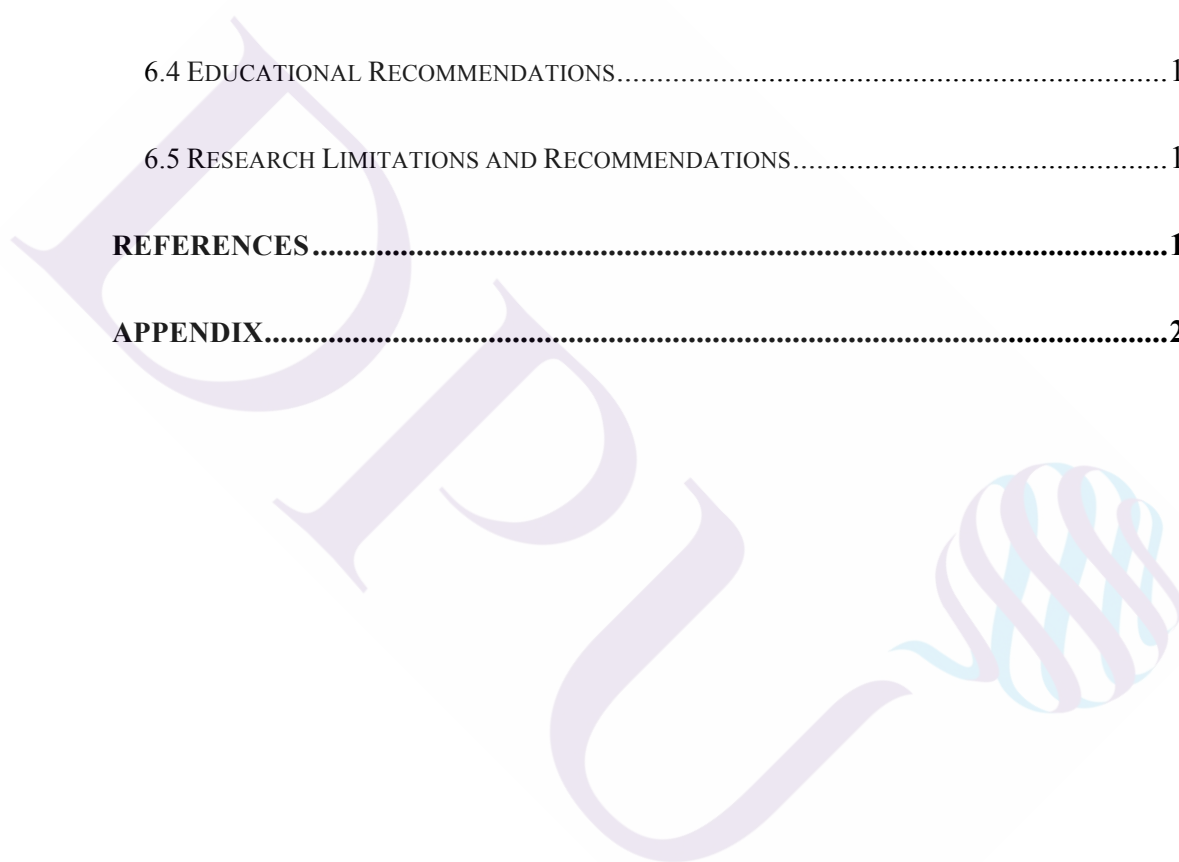


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CHAPTER 1

INTRODUCTION

1.1 Research Background And Motivation

Innovation has become the first driving force for human development. Seeking innovation is not only the necessity that forces humans to do so, but it also has become the trend of the world. Currently, seeking innovation is becoming the core strategy for many countries to seek competitive advantages (State Council of the People's Republic of China, 2016). According to State Council of the People's Republic of China (2016), China's higher education should focus on serving the country's development of innovation, promoting entrepreneurship and innovation on a mass level, cultivating more innovative talents, focusing on talent training, and effectively improving the quality of personnel training since those are the important goals for future higher education reform and development. Those are also the necessary steps for China to build world-class universities and first-class academic disciplines, accelerate the construction of modern university systems with Chinese characteristics, guide universities to pursue academic excellence, and establish interdisciplinary and comprehensive research teams, promote educational innovation, reform old-fashioned talent cultivation models, and bring into full play scientific spirit, creative thinking, innovative development and social responsibility during the entire process of education.

According to Ministry of Education of the People's Republic of China (2010), talent cultivation takes the center stage of university development. Training individuals to be talents is the top priority of the university. As the main components of institutions of higher learning, teachers are the main force in academic and professional developments in higher education. Therefore, teachers' innovative ability is the basic requirement for the promotion of the development of colleges and universities. Zhu (2015) proposes that innovative teachers can promote innovative education, and innovative education can produce innovative talents. Therefore, the key to the realization of educational innovation lies in teacher innovation. On the other hand, teachers' innovative behavior is the core of promoting education innovation because it can help to realize and perfect new ideas and maximize individual performance to cultivate innovative talents (Thurlings, Evers & Vermenulen, 2015; Zhou & Hoever, 2014). Moreover, Thurlings et al. (2015) point out that with rapid development of technology and social changes, not only is it necessary to emphasize individual's innovative behavior, but it is also of great importance to encourage the innovative behavior of teachers. In terms of university teachers' innovative behavior, it often refers to the use of innovative and unique insights in educational practice and teaching and in scientific research. It also refers to the discovery of effective educational methods as well as the realization of behaviors in scientific research that promote social development (Xu, 2011).

First, universities should be committed to improving the quality of personnel training, actively cultivating innovative top talents, and regarding the improvement of the social responsibility, innovation and practical ability of students as the focus of the reform of the talent training mechanism (Du, 2015). Therefore,

the cultivation of university teachers' knowledge and behavior of innovation is of particular importance. In fact, only after university teachers possess the ability to innovate, are they able to cultivate innovative talents. Second, universities should focus on improving the level of scientific research. As an important research base for the development of science and technology, it is extremely imperative that universities harbor teachers who possess the ability to conduct innovative research, since in most cases, only university teachers excel in discovering new knowledge, creating new technologies, summing up new experiences, and transforming them into concrete jobs that are more productive than before (Chen & Shen, 2009); third, we find that today, universities' academic activities that aim at promoting social development play an active role in emancipating the mind, revamping traditional ideas, promoting sustainable social development and leading a way in the development of new points of view concerning our society and our culture (Du, 2015). As an important part of the society, colleges and universities have more and more prominent advantages in providing new talents, new technology and advanced training for social and economic development. And all these require teachers to possess innovative ability so that they can play a big part in promoting the development of society and economy. Fourth, the manifest destiny of colleges and universities lies in the mission of creating new knowledge and culture while preserving the old ones. Mr. Wang (2007) points out the essence of university culture, that is, the culture of encouraging innovation is the soul of the university. Throughout the development of world's top universities, their contribution to the society is reflected in cultivating innovative talents who have been dedicating themselves to the society and in encouraging university teachers to make progress in

the developments of scientific research, social civilization, and cultural heritage. In fact, all these contributions require strong innovative capability to realize, and university teachers are the main bearers and implementers of such missions of innovation. All these show that innovation is an important mission of higher education and a competence that university teachers should possess.

Previous studies on innovative behavior mainly focus on organizational factors that surround the workplace (Amabile, 1996; Scott & Bruce, 1994; Feifei & Jinghuan, 2015), organizational characteristics (Oldham & Cummings, 1996), leadership factors (Scott & Bruce, 1994), innovation and social networks (Scott & Bruce, 1994). However, the influence of variables in positive psychological development on individuals' innovative behavior was rarely discussed from the perspective of individual personal traits in those studies (Lee & Jeng, 2014). In fact, savoring is a concept developed from the perspective of positive psychology (Seligman, 2002), and the savoring proposed by Bryant (1989) refers to the belief in the strategy of actively experiencing positive emotion and affect. Therefore, savoring includes an initiative to feel the positive experience (Guo, Ren, Zhang, & Bryant, 2013). Bryant (1989) points out that individuals with savoring are good at enhancing and prolonging their personal pleasure through the experience of positive events. However, university teachers are different from workplace employees. Their teaching careers are complicated and challenging, requiring great personal dedication. In addition, their jobs involve instruction of knowledge and skills that require innovation, thus playing a key role in shaping the overall development of students' personality, emotions, and social values. According to Fredrickson's (2005) Broaden-and-Bulid Theory, the savoring of university teachers is a positive

mechanism that will influence innovative behavior in a positive way. Therefore, how to promote innovative behavior through the medium of university teachers' savoring for the purpose of cultivating innovative talents at the university level needs in-depth analysis.

At the individual level, the positive impact of university teachers' savoring on individual innovative behavior is a positive mechanism (Fredrickson, 2005). Individuals can absorb domain knowledge and have it internalized; and in this process, individuals will generate cognition, motivation, experience, etc., and will also form confidence in the relevant field; that is, self-efficacy will be formed. Based on creativity studies, creative self-efficacy is formed due to individual's motivation, cognition and belief in creativity; that is, creative self-efficacy is the individual's confidence and attitude towards his creative performance or creative production. In the past, research on creative self-efficacy mainly focused on two groups of individuals: workplace employees (Tierney & Farmer, 2002) and university students (Liang & Chang, 2014). There is little research on the impact of creative self-efficacy on innovative behavior for university teachers. Mathisen and Bronnick (2009) point out that the enhancement of creative self-efficacy allows individuals to produce more creative behaviors. Scholars have also found that creative self-efficacy is an important factor in promoting individual creativity (Lin & Qiu, 2008; Hsu, Hou, & Fan, 2011), Chen and Guo (2013) have found that individuals' innovative behaviors improve as their creative self-efficacy is enhanced. Fan (2017) points out that one of the important tasks of today's universities is to stimulate teachers' imagination and creativity in order to further cultivate students' interest in their fields of studies and their independent learning ability. Therefore,

this study regards creative self-efficacy as an important factor in exploring innovative behavior of university teachers at the individual level.

According to R. Richards in "New Ideas on Daily Creativity and Human Traits", everyday creativity is actually related to aesthetics. Aesthetics not only refers to writing poetry or chorus, but also concerns helping children to be creative at school. (Richards, 2009). When we look closely at a work of art, we will connect ourselves through countless conscious and subconscious minds and potentials, and form our own response to visual stimuli to initiate our daily creativity (Richards, 2009), and the thinking that occurs when a viewer meets an aesthetic object is a rewarding experience which is called aesthetic experience (Maquet, 2003). Lin (2009) points out that the aesthetic experience is not a passive feeling, but a form of creativity that can transform life into a positive and active being, just as quotes by TJ Diffey that "the aesthetic experience expands our thinking, opens our hearts, and guides us into new and unknown areas." Moreover, scholars also believe that the aesthetic experience is conducive to the development of innovative behavior (Maquet, 2003; Richards, 2009; Dewey, 1981; Lussier, 2010). Therefore, this study aims to analyze the impact of aesthetic experience on innovative behavior.

Self-efficacy mediates the relationship between individuals' cognitive experience and their behavioral performance (Bandura, 1986). Studies have found that creative self-efficacy exerts a mediating effect on the generation of individual creative behavior and creativity (Chen & Guo, 2013). Chang, Wang and Lee (2015) have found that savoring affects individual creative performance through creative self-efficacy, which plays an important intermediary role in this regulatory process (Bandura, 1982). That is, self-efficacy plays a very important central role in

individuals' self-regulatory system. In addition, self-efficacy also mediates the relationship between individual cognitive experience and their behavioral performance (Bandura, 1986). Studies have also found that creative self-efficacy has a mediating effect on the generation of individual creative behavior and creativity (Chen & Guo, 2013). Therefore, some scholars believe that aesthetic experience can increase individual self-efficacy and develop their innovative behavior (Maquet, 2003; Lin, 2009; Dewey, 1981). Therefore, this study uses creative self-efficacy as an intermediary effect to explore whether university teachers' savoring will further influence teachers' innovative behavior through the intermediary of creative self-efficacy.

The savoring proposed by Bryant and Veroff (2007) refers to the capability to actively feel the positive emotional experience, while positive emotion is closely related to innovative behavior. Savoring is an indicator of positive emotions (Nelson & Simmons, 2003; Simmons, 2002). It is also the individual's capability to immerse pleasure in positive experiences. Pleasure is a positive emotion or affect such as satisfaction, joyfulness, happiness, confidence, hope or optimism. Adopting some specific savoring strategies will enhance people's aesthetic experience. For example, the use of reminiscence can prolong positive experience, and sharing with others helps to construct individual psychological resources (Bryant, Yamold, & Morgan, 1991). Related studies have shown that when individuals listen to positive categories of music and focus on intentional attention, people will construct more aesthetic experiences (Ferguson & Sheldon, 2013). When it is absorbed, accumulated, and internalized by individuals, aesthetic experience can enhance self-confidence and help to meet challenges. In addition,

aesthetic experience is also an important factor in initiating self-innovative behavior (Davies, Higgins, Hopkins, Stecker, & Cooper, 2009). At the same time, aesthetic experience can increase self-efficacy and develop individual innovative behavior (Lin, 2009; Dewey, 1981). Davies et al. (2009) points out that aesthetic courses can be used to increase students' aesthetic experience, which in turn leads to students' intrinsic motivation and self-belief, strengthens learners' daily imagination and promotes innovative behavior. Through the absorption, accumulation and internalization of aesthetic experience, individuals can enhance their self-confidence and help them to accept challenges. In addition, aesthetic experience is also an important factor in bringing about self-innovative behavior. Lin (2009) also points out that aesthetic experience is not a passive feeling, but one that can transform life into positive and active innovative behavior. Current research has explored the influence of innovative atmosphere in organizations on individual innovative behavior (Ekvall, 1996; Hunter & Mumford, 2007), but such research lacks the use of aesthetic experience as an intermediary to study innovative behavior. Therefore, this study is to explore whether savoring will influence the innovative behavior of university teachers through the intermediary of aesthetic experience.

At present, it is true that there exist many studies on the innovative ability of Chinese university teachers, but those studies mainly focus on pedagogical research innovation or scientific research innovation (Xu, 2011). There are scarce studies on university teachers' savoring, creative self-efficacy, aesthetic experience or innovative behavior, thereby still existing the following problems:

(1) Studies on savoring have produced rich results in Western academic and professional fields, but research on savoring in China is still in its infancy (Miao,

Pan, & Zhu, 2012). Conducting research in the context of China is essential to our understanding of the importance of savoring. Due to cultural diversities, individual personality traits and individual perceptions of savoring are different in different cultures (Bryant, 2013), so the savoring study conclusions drawn in the Western context are not fully applicable to Chinese culture. Therefore, based on China's status quo and cultural background, this study explores the current studies on savoring in China and aims to provide an effective channel for the study of savoring of Chinese university teachers.

(2) There are few studies on teachers' innovative behavior. At present, most research on innovative behavior is concentrated on manufacturing industry (Damanpour, 2010), with little attention paid to service industry, especially the innovative behavior of service providers or educational practitioners (Pan, 2014). The research is particularly weak on the individual innovative behavior of university teachers who play a key role in cultivating innovative individuals and engaging in scientific and technological innovation. This paper targets the Chinese university teachers, believing that for university teachers, the characteristics of their profession determine that individual innovative behavior is more of a role behavior (Thurlings, Evers, & Vermeulen, 2015), rather than organizational individual behavior, thus requiring a much higher degree of innovation. Therefore, research on individual innovative behavior of university teachers will greatly promote the richness and perfection of the research results in the field of individual innovation.

(3) Currently, there are few studies on individual innovative behavior from the psychological perspective of cognitive and emotional responses at the individual level of teachers. Previous studies on innovative behavior mostly stayed

at the organizational level. However, the micro-mechanism behind the formation of innovative behavior was rarely analyzed from the psychological perspective of individual cognition and emotional response (Lee & Jeng, 2014). Based on theories of social cognition and creativity, this paper takes cognition, emotion and reaction as the logical starting point and attempts to explore ways to improve the savoring and creative self-efficacy of university teachers and to obtain strong psychological motivation and positive emotions from those teachers (Clore, Schwarz, & Conway, 1994). As a result, their self-recognition and internalized organizational values can be combined so as to stimulate and motivate them to produce more innovative behavior (Hong, 2004).

(4) So far, there has not yet appeared the study on innovative behavior with aesthetic experience as an intermediary. This study proposes that savoring have both direct and indirect effects on individual innovative behavior. In addition, this study attempts to use creative self-efficacy and aesthetic experience as mediating variables between savoring and individual innovative behavior. In existing research, the influence of innovation in organizational settings has been discussed (Ekvall, 1996; Hunter & Mumford, 2007), but there is still no study which takes aesthetic experience as an intermediary to target innovative behavior.

1.2 Significance of the Study

1.2.1 Significance in theory

(1) Researchers have conducted a prodigious volume of studies on organizational innovative ability and innovative behavior, but there are few researches on individual innovative behavior, and the research on individual

innovative behavior is mostly limited to the field of technological innovation, focusing on employee innovative behavior in research and development enterprises (Damanpour, 2010), while there is little research which specializes in the savoring and innovative behavior of university teachers who are part of intellectual employees (Pan, 2014). This study intends to study the influence of savoring on innovative behavior at the individual level of university teachers, trying to extend innovation research on individual innovative behavior from manufacturing industry to higher education, from enterprise or organizational level to individual level, thus enriching studies on subcategories of innovation theories, especially those of individual innovative behavior.

(2) Savoring theory is rooted in positive psychology (Bryant & Veroff, 2007; Seligman, 2002). Creativity of teachers is an important factor in predictive behavior. This study attempts to explain the mechanism of university teachers' savoring behind individual innovative behavior. Based on existing studies, research on the teacher's savoring is still in evolution. Firstly, in terms of the targeted individuals, most of the relevant research is limited to the employees of the enterprise, and little research is involved in teachers' work behavior variables. Secondly, in terms of the depth of research, there are few researches on the mechanism behind the influence and activation of university teachers' innovative behavior (Pan, 2014). Taking this as a breakthrough point and entry point, this paper tries to propose and verify the influence of university teachers' savoring on innovative behavior and its mechanism behind its causation. In addition, this paper also tries to explore the intermediary functions of creative self-efficacy and aesthetic experience when the relationship between savoring and innovative behavior is

involved, which will further enrich and perfect studies on theories of innovative behavior and social cognition.

1.2.2 Practical significance

This paper investigates the influence of Chinese university teachers' savoring on their innovative behavior, with creative self-efficacy and aesthetic experience as mediating variables. It also analyzes the first-hand data obtained from a survey, so that certain research hypotheses and theoretical models can be verified or revised. This paper, while playing a part in enriching theories on innovative behavior and social cognition, also attempts to obtain a clear understanding of the innovative work of university teachers in China. In addition, this paper attempts to provide a theoretical basis for the establishment of innovative incentive mechanism and promotional strategy for university teachers so that they can play a key part in building innovative universities by adapting to the domestic conditions of China. Finally, this paper is of great significance in improving the innovative ability of Chinese colleges and universities and even the innovative ability of the whole society.

Savoring is not only the psychological foundation for the active development of university teachers, but it is also the psychological foundation for the promotion of self-education. Therefore, it is of great practical significance to study the savoring of university teachers. Since there are few studies on the savoring of university teachers in China (Miao, Pan, & Zhu, 2012), this study will provide a theoretical guidance and practical help for the mental health of university teachers by revealing the inner mechanism of self-improvement. As a result, the personal qualities of university teachers will be improved so that they can educate students

and serve the society in a better way.

This study explores the delicate relations among organizational management behavior of colleges and universities, savoring of university teachers and individual innovative behavior. In addition, in this study, the scientific and rational management methods and incentive mechanism, the effective stimulation of teachers' innovative enthusiasm to improve their innovative ability and innovative performance are also touched upon since they are of great practical significance in promoting the development of innovative universities. It is believed that the results of this study are of significant help to the human resources management services of colleges and universities as well as to the implementation of talent development strategies in colleges and universities.

1.3 Purpose of the Study

The purpose of this study is to explore the mediating roles of creative self-efficacy and aesthetic experience in the influence of university teachers' savoring on their innovative behavior so that certain suggestions for improving university teachers' innovative behavior can be provided. Based on this purpose, this study is carried out as follows.

- (1) Analyze differences among university teachers' savoring, creative self-efficacy, aesthetic experience, and innovative behavior, which occur in different backgrounds;
- (2) Analyze the influence of university teachers' savoring on their innovative behavior;
- (3) Analyze the influence of university teachers' savoring on creative

self-efficacy;

(4) Analyze the influence of university teachers' savoring on aesthetic experience:

(5) Analyze the influence of university teachers' creative self-efficacy on their innovative behaviors;

(6) Analyze the influence of university teachers' aesthetic experience on their innovative behavior;

(7) Analyze the influence of university teachers' aesthetic experience on creative self-efficacy;

(8) Explore the influence of university teachers' savoring on innovative behavior through the mediator of creative self-efficacy;

(9) Explore the influence of university teachers' savoring on innovative behavior through the mediator of aesthetic experience.

1.4 Major Problems to be Dealt with in the Study

Using quantitative related research design, the university teachers' savoring, innovation behavior, creative self-efficacy, and aesthetic experience are tested. This study uses Structural Equation Modelling (SEM) to analyze the inter-influence among university teacher's savoring, innovative behavior, creative self-efficacy and aesthetic experience.

This study mainly analyzes the influence of university teachers' savoring on their innovative behavior. In addition, the intermediary effects of creative self-efficacy and aesthetic experience on teachers' savoring and on teachers' innovative behavior as well as the interactive effects of university teachers' savoring,

innovative behavior, creative self-efficacy and aesthetic experience are also explored from eight different perspectives:

Research Question 1: What are the differences among university teachers' savoring, creative self-efficacy, aesthetic experience, and innovative behavior?

Research Question 2: Does the university teacher's savoring affect their innovative behavior?

Research Question 3: Does the university teacher's savoring affect their creative self-efficacy?

Research Question 4: Does the university teacher's savoring affect their aesthetic experience?

Research Question 5: Does the creative self-efficacy of university teachers affect their innovative behavior?

Research Question 6: Does the aesthetic experience of university teachers affect their innovative behavior?

Research Question 7: Does the aesthetic experience of university teachers affect their creative self-efficacy?

Research Question 8: Does the university teacher's savoring affect their creative behavior through creative self-efficacy?

Research Question 9: Does the university teacher's savoring affect their innovative behavior through aesthetic experience?

CHAPTER 2

LITERATURE REVIEW

2.1 Savoring

The concept of coping has been widely discussed in the psychology community, and it emphasizes the conscious and active approaches of individuals when facing negative events (Lazarus, 1993). Bryant and Veroff (1984) suggest that psychology requires a specific concept of regulating positive events. That is, people use certain cognitive or behavioral strategies to deal with positive events, thereby regulating their positive experience, enabling them to obtain a high-intensity positive experience and a long-lasting positive experience. Based on this suggestion, Bryant (1989) proposes a four-factor model of Perceived Control: Avoiding, Coping, Obtaining, and Savoring. That is, individuals should first avoid stressful events as much as possible in their daily lives. Once they occur, individuals need to take appropriate measures to reduce the influence of negative experiences. Similarly, people can not only passively gain positive experiences when facing positive events, but they can also proactively enhance and sustain their positive experiences through the fourth factor “savoring”.

Savoring in positive psychology is a concept that is rich in content and full of vitality. Related research has found that people’s being able to “cope” with life does not mean that they can “savor” life. The passing of a hard time does not mean an increase in the sense of happiness (Guo et al., 2013). Therefore, based on China’s national conditions and cultural background, it is of great importance and of far-reach

-ing significance to explore the status quo of savoring with Chinese characteristics and to study its impact on innovative behavior in China.

2.1.1 Definition of Savoring

The etymological source of the English word “savoring” derives from “savor”, which originated from the Latin word “sapere”, meaning “to taste,” “to flavor,” and “have more intelligence.” From the point of view of semantics, it contains a kind of active meaning; from the perspective of savoring process, to actively feel a positive experience is also the key of savoring (Guo et al., 2013).

Bryant (1989) points out that savoring derives from positive psychology, and savoring is defined as four kinds of control actions taken in perception when people perceive events; that is, “escape” and “adapting” relate to negative results; and “acquisition” and “savoring” lead to positive results. In the face of positive events, “acquisition” is the primary action, and “savoring” is the secondary action. Liu (2009) believes that savoring is closely related to people’s psychological characteristics, daily habits and social relations. Bryant (1989) positions savoring as a process of triggering, appreciating, and enhancing positive experiences. In their book “Savoring: A New Model of Positive Experience,” Bryant and Veroff (2007) define “savoring” in this way: Savoring is the capability that enables people to induce, appreciate and enhance positive experiences as well as the process through which people manage positive emotions. In essence, savoring is not only a consciousness of positive experience, but also a deliberate processing of and deliberate attention to positive feelings. That is to say, savoring is the capability of an individual to proactively create a positive emotion or feeling.

Early research on savoring was mainly focused on comparison with coping

(Bryant & Veroff, 1984; Bryant, 1989). Since savoring research was only part of the research, it did not attract enough attention. With the rise of positive psychology, researchers have found that the elimination of negative experiences does not mean the acquisition of positive experiences (Seligman, 2002); that is, the coping methods used to reduce pain cannot be applied to the savoring of happiness. Russell (2003) also points out that the means used to cause pleasure and its application have been neglected in the psychological world.

From the academic point of view, savoring is a positive pleasure, but it does not mean the elimination of feelings such as depression, loss, frustration, etc. Dealing with negative emotional events does not mean that positive emotions will increase (Bryant & Veroff, 1984; Seligman, 2002). Savoring is an important concept of positive psychology. It involves the activation of the individual's whole function and the process of pursuing positive well-being (Bryant, 2003). In short, individuals should actively pursue positive feelings instead of relying on eliminating negative feelings to create positive feelings. From the empirical point of view, savoring was first proposed by Bryant (1989) who put forward a four-factor model of perceived control and discussed the concept of "coping". Lazarus (1993) mentions that "coping" refers to the intentional and proactive handling of negative events. Savoring is the opposite of "coping", which refers to an individual's active seeking, feeling, and enhancing the happy experience brought about by positive events (Bryant & Veroff, 1984). Individuals with good savoring can better enhance and prolong their personal pleasure through the experience of positive events (Bryant, 1989). In addition, savoring has been proven to be capable of maintaining and enhancing a person's positive emotional experience (Bryant, 1989, 2003; Seligman, Rashid, & Parks,

2006).

Guo et al. (2013) proposes that savoring includes a kind of initiative to feel the positive experience. In the context of positive psychology, savoring and positive experience are closely related, but savoring is not the same as positive experience. Savoring is intentional processing and attention based on positive experience. Bryant and Veroff (2007) point out the ideal basis for savoring creation: (1) direct feeling of or direct connection to what is happening now; (2) liberation from stress; and (3) attention to and focus on experience.

In summary, savoring is no longer just a “coping” with positive events; it includes the process of gaining and enhancing a positive experience. Positive experience only brings us a sense of pleasure (positive emotion) when positive events occur, but savoring is not the case. It will induce, prolong and enhance the positive experience through active discovery and careful attention.

2.1.2 Relevant theories on savoring

2.1.2.1 Optimization theory

Berlyne (1960) suggests that humans tend to focus on stimulus on medium-level curiosity. This stimulus on medium-level curiosity is particularly prone to people’s appreciation and savoring. When individuals notice that this stimulus maintains a moderate level of curiosity, they are in a state of savoring such stimulus. But as time goes by, such stimulus will lose vitality and attractiveness, and the special pleasure that it brings to people will disappear gradually.

Based on these studies, Helson (1964) proposes the concept of “adaptation level” of perceptual responses, arguing that people often adapt and habitually enjoy the pleasant process. He defines “adaptation” as gradual weakening of responses to

repetitive stimuli and reconstructing awareness about stimuli and about the impact of stimuli on life. Later, Brickman, Coates and Janoff-Bulman (1978) expanded the concept, suggesting that the rate of adaptation to pleasant stimuli is influenced by the quality of the stimuli and by multiple dimensions of perceptions. If the experience of being immersed in savoring is a relatively simple stimulus, we don't want to savor it for too long. If the stimulus, including the dimension of perception, is complex, we naturally take the initiative to focus on the various dimensions of the stimulus until the savoring process disappears. The theory of optimization level is a heuristic theoretical viewpoint that helps us to understand the meaning of savoring from simple to complex.

2.1.2.2 Expectancy value theory

The expectancy value theory stems from the study of the cognition on motivation and describes the influence of the inner psychological power of people on important decisions. This theory is quite concerned with the impact of expectations and values on every possible action within the range of options available to individuals. Value usually refers to the goal that induces people to perform actions that can be defined and decided under given conditions, and the goal also includes motivation that can be activated through environmental factors—stimuli and personality factors (Bryant & Veroff, 1984). On the other hand, expectation refers to the perception of the likelihood that a goal can be achieved under certain conditions, including an individual's personality traits such as his or her optimistic or pessimistic traits (Scheier & Carver, 1985) and the personality of hope (Snyder, 2002). In fact, there are three factors that determine people's attention to savoring: (1) the degree of motivation and the nature of an individual's concerns; (2) the general motivation of an

individual to obtain happiness; and (3) an individual's expectations for a successful savoring experience. Admittedly, the expectancy value theory is an extremely complex theoretical point of view, and it provides a theoretical foundation for individuals to choose a specific savoring style.

2.1.3 Relevant studies on savoring

2.1.3.1 The structure of savoring

Bryant, Chadwick and Kluwe (2011) have integrated previous research on savoring and proposed a structural model of savoring: (1) savoring experience refers to an individual's feeling, composed of stimulation, results, events, feelings, affects and reactions. In fact, in the early economics literature, savoring is based on three modes that lead to positive experiences of individuals; namely, memories of past positive events, feelings about current positive events, and expectations for future positive events (Jevons, 1905). As a result, savoring is divided into three categories based on duration of time: "reminiscing," which emphasizes enhancing the positive experience by recalling the positive experience of the past; "savoring the moment," which emphasizes the enhancement of the positive experience that occurs "this moment," "anticipating," which emphasizes increasing the positive experience of the present by imagining the positive experience of the future. These three savoring extend and enhance the current positive experience by reminiscing about the past, focusing on the present and looking forward to the future, while savoring the moment takes the center stage. (2) The savoring process refers to the corresponding physiological and psychological reactions, including the continuation of the entire savoring process, specifically, thanksgiving, basking, marveling, luxuriating, etc. (3) Savoring response or strategy, or the operational level of the savoring process, refers

to people's thoughts and behaviors generated by positive events, such as behavioral expression, sharing with others, memory construction, etc. Therefore, the structure of the savoring model, from the outer layer to the inner layer, is followed by savoring experience, savoring process and savoring strategy, in which the savoring strategy is located at the core layer.

In terms of savoring experience, Bryant and Veroff (2007) divide savoring experience into two categories according to differences in savoring experience: (1) self-focused savoring. This positive experience stems from one's own feelings and experiences, such as excitement from obtaining excellent scores; (2) world-focused savoring. This category of savoring refers to positive emotions that mainly come from external events, such as the love of the nature's beautiful scenery, and most of such feelings are sub-conscious, uncontrollable emotional responses. Based on the sources of savoring experience, savoring experience can be divided into savoring that mainly comes from cognitive reactions and savoring that mainly derive from experience absorption, namely, experience from subjective introspection and personal perception.

Different savoring processes are based on the differences between different savoring experiences, with different positive emotions regulating each other, such as gratitude regulating thanksgiving, enjoyment regulating sense of pride, admiration regulating awe, and intoxication regulating sensory pleasures.

Bryant and Veroff (2007) summarize the extent of the "savoring belief", which includes the degree to which pleasant things, memories, and pleasure of life are savored. In addition, the belief in individual savoring includes the behavioral attitude of savoring. They also put forward ten major savoring strategies that people use when facing positive events, three of which are behavioral savoring strategies, and the other

seven are cognitive savoring strategies.

In terms of behavioral savoring strategies, they include: (1) sharing with others, telling the sharing partner how much you cherish this moment; (2) immersing attention (absorption), focusing on an event, or immersing oneself in positive events, without any other forms of thinking; (3) behavioral expression, naturally revealing your own positive emotions, such as cheering, laughing, not making any cover.

Cognitive savoring strategies include: (1) comparing, mainly comparing downwards, that is, comparing your current experience with your previous experience or with other people's experience that was worse than your own; (2) sensory-perceptual sharpening, namely, working with the will, isolating irrelevant factors, enjoying the good times by enhancing your own perceptions; (3) memory building, in other words, proactively storing pleasant memories and recording your life experiences for future recalls and sharing with others; (4) self-congratulation, i.e. reminding oneself that you are excellent and can impress people; (5) temporal awareness, which reminds you that good times are fleeting, so you must enjoy it in time; (6) counting blessing, that is, cherishing what you have, tell yourself how lucky you are; (7) avoiding kill-Joy thinking, specifically, avoiding negative thoughts that stifle pleasure when positive events occur.

2.1.3.2 Study on the influencing factors of savoring

Savoring is the ability of people to enjoy a positive experience through tasting. It is influenced by many factors. These factors include: individual personality traits, daily life, materialism (money, etc.), work performance, emotions, happiness, education, etc. Through the analysis of savoring and other aspects, the acquisition of savoring beliefs is related to the above factors, with specific details are as follows:

(1) Savoring is affected by individual personality traits

Studies have found that in terms of personality traits, individual concentration and personal habits take time to influence the savoring experience. Zuckerman and Michael (1979) research shows that some people prefer to pay attention to situations that are sensational, require willingness to work and are uncertain. These traits encourage people to obtain more savoring experience in life. At the same time, people's differences in time orientation will also affect people's positive experience. Zimbaro and Boyd (1999) suggest that personality differences in time orientation are closely related to individual differences in emotions, behaviors, and cognition. People who hold the current time orientation are more inclined to directly focus on the events that are being savored at this moment. On the contrary, others who tend to plan or think about the long-term consequences of their behaviors often ignore the current savoring experience by gaining a savoring experience from the expectation of future dreams. In addition, some people hold a past time orientation and prefer to acquire a savoring experience from recalling past events, but they often lose the opportunity to enjoy a happy experience in their current lives. Relevant studies have shown that individuals with high self-esteem tend to savor more positive events, while individuals with low self-esteem tend to suppress their positive emotions (Wood, Heimpel, & Michela, 2003). Ng (2012) has found that with a specific savoring strategy, highly neurotic individuals can achieve the same level of pleasure as lowly neurotic individuals, while they tend to suppress their positive emotions and make their emotions develop in the wrong direction more quickly. A study by Smith and Bryant (2013) shows that individuals with type A personality use less savoring strategies in the face of positive events. Keeney (2009) has found that

narcissism is not detrimental to an individual's savoring on positive events when he studies the influence of others' recognition and praise of one's own achievements on the success of savoring. Unexpectedly, self-esteem plays an important role in the success of savoring.

(2) Savoring is affected by daily life

Bryant (2003) points out that daily life scenarios can lead to an individual savoring experience. Those daily life scenarios include diet, sex, closeness to nature, sports, work and leisure, contact with art and reading, etc. Some of these experiences are spontaneous and some are planned. All these diverse scenarios can lead to an individual savoring experience. Bryant (2003) studies the factors affecting life experience and finds that women score significantly higher than men in terms of their memories of the past, their future expectations and their total savoring. This may be because women are more enriched than men in their inner minds and therefore tend to outline their future by imagination (Huba, Aneshensel, & Singer, 1981), and they are also willing to spend more time reminiscing about their good times of the past (Bryant, Yarnold, & Morgan, 1991). At the same time, women can also experience stronger emotions and tend to share with others, which can further enhance their positive experience.

In fact, being accustomed to the pleasures of daily life often impacts people's positive experience in a negative way, thereby causing a decline in their savoring (Lyubomirsky, 2011). Researchers have also pointed out that the pursuit of peak experience will reduce people's ability to savor everyday positive experience (Quoidbach, Dunn, Petrides, & Mikolajczak, 2010). Therefore, giving up some peak pleasure experiences in a timely manner will help people to savor their experiences

better (Quoidbach & Dunn, 2013).

(3) Savoring is affected by materialism and money

Kurtz (2008) has conducted an experiment in which certain graduating students were divided into two groups and they were told different times for leaving school. The results found that the group that was about to leave the school soon showed more pleasure; that is to say, students in this group showed higher savoring. Ferguson and Sheldon (2013) have studied the vertical interaction between savoring and the number of positive events per day and found that when individuals experience a few positive events, their savoring will increase. Therefore, it can be concluded that to a certain extent, scarcity promotes savoring, and abundance may destroy happiness. Quoidbach, Dunn, Petrides and Mikolajczak (2010) also point out that money can weaken people's ability to taste positive emotions and experiences. For example, spending money on something else will reduce the time an individual spends on a delicious chocolate.

(4) Savoring is affected by work performance

Lin, Chen and Wang (2011) use the sales staff of six insurance companies in Taiwan as the subjects and measure the savoring of the subjects by the using Saving Beliefs Inventory (SBI). They have studied the relationship between savoring and positive emotions and perceived work performance. They use the Positive and Negative Impact Scale (PANAS) to measure the positive emotions of the subjects and the four work performance measures to assess the work performance of the subjects. The results show that savoring is positively related to the work performance of the subjects and that savoring and positive emotions interact with each other in work performance. The result also shows that savoring has a certain impact on work

performance.

(5) Savoring is affected by mood regulation

Savoring is a strategy for regulating positive emotions. Hurley and Kwon (2012a) have conducted an intervention study based on emphasis on savoring, and find that savoring can result in fewer symptoms of depression, but has no significant impact on the improvement of positive emotions. Carl, Soskin, Kerns, Barlow (2013) use 165 non-clinical undergraduate students as research subjects to measure the response of the subjects to positive emotional regulation with anxiety and depressive symptoms and savoring beliefs as baselines. The results show that high anxiety and high depression are associated with low positive emotional reactions and reduced positive emotions while high savoring beliefs are associated with high positive emotional responses and increased positive emotions. When talking about the development of positive technology, Botella, Gaggioli, Wiederhold, Alcaniz and Banos (2012) also point out that because savoring can improve an individual's positive state in a short period of time. Ritchie and Bryant (2012) have confirmed that positive state mindfulness allows individuals to better savor the present experience and thus effectively increase the individuals' positive experience.

(6) The influence of savoring on happiness

Studies have shown that savoring in the context of positive psychology is closely related to subjective well-being (Bryant, 2003). Savoring makes people consciously pay attention to positive events, thus gaining positive emotions and improving the experience of happiness.

Relevant studies have also suggested that the adoption of specific savoring strategies will increase people's level of well-being. For example, using memory

construction can prolong positive experiences (Bryant, Yamold, & Morgan, 1991), while sharing with others helps to construct individual psychological resources. relevant research shows that when individuals listen to positive categories of music and focus their attention, they will experience more positive emotions (Ferguson, & Sheldon, 2013). Recently, researchers have found that individuals use appropriate savoring strategies based on different types of positive events to achieve positive emotional effects. However, to maximize positive emotions, individuals must master more savoring strategies and use them in a flexible manner (Quoidbach, Berry, Hansenne, & Mikolajczak, 2010).

Bryant (1989) proposes that the acquisition of the savoring beliefs of the subjects is highly correlated with the happiness of life in the four-factor model of life perceived control. Bryant and Veroff (2007) find that the “positive attention” group (more attention to pleasant things such as beautiful songs) in the savoring experiment have higher levels of happiness than the “negative attention” group (more attention to unpleasant things such as smog, etc.). In addition, some studies have shown that deliberate pursuit of high levels of happiness can make people ignore communication with others and become lonely (Mauss, Savino, Anderson, Weisbuch, Tamir, & Laudenslager, 2012).

Chadwick (2012) have studied 13-15-year-old teenagers and 16-88-year-old adults and have found that for individuals of any age group, savoring can enhance their subjective well-being. The difference between teenagers and adults is that teenagers use fewer savoring strategies and tend to suppress positive emotions. This means that with the increase of age, people have increased the use of various savoring strategies (Guo, Ren, Zhang, & Bryant, 2013). Pan (2013) finds that the savoring

scores of people under 25 years old were significantly lower than those of 25-50 years old and over 50 years old. It is possible that with the ups and downs in life, the elders tend to face happiness and unhappiness of life with a more open attitude, thus making them savor their lives better.

In the field of cognitive neuroscience, researchers have demonstrated the unique physiological mechanisms of pleasure (Burgdorf & Panksepp, 2006). According to the concept of savoring, the biggest difference between savoring and pleasure is the intentional attention to the pleasure experience. Takahashi et al. (2008) have studied the neural mechanism of pride (one of the four main savoring experiences, brought by the enjoyment of achievement) and pleasure, and have found that experience of pride activates more of the middle temporal gyrus and the left temporal pole, brain regions associated with social cognition, while pleasure experience activates the ventral striatum, brain regions associated with pleasure and appetite, which means that savoring experience is different from simple pleasure experience.

At present, there are few specialized studies on the neurophysiological mechanisms of savoring, due to two main reasons. One is that savoring experiences are hard to distinguish. As Kringelbach and Berridge (2009) mentioned, “the biggest challenge in studies on pleasure and happiness is its being very subjective and there exists an ambiguous boundary between the state of being eudemonic and the state of being hedonic. The other is, that, due to limitations of equipment, the current mainstream PET and MRI neuroscience measurement techniques generate relatively loud noise during the experiment, which causes interference with the intention to and focus on savoring requirements.

(7) The impact of savoring on education

Obviously, some savoring strategies can be applied to school education. For example, Kurtz and Lyubomirsky (in press) proposes that a discussion class on daily minute record (the combination of memory construction and sharing with others used in savoring strategies) can be applied to school education so as to enhance students' positive emotions. At the same time, researchers have also discussed the values and possibilities of applying savoring strategies to education (Ritchie & Bryant, 2012; Gentzler, Morey, Palmer, & Yi, 2013), clinical practices (Hurley & Kwon, 2012a; Botella et al., 2012; Carl, Soskin, Kerns, & Barlow, 2013), organizations (Rupert, Miller, Tuminello Hartman, & Bryant, 2012; Zhang, 2012) and other fields. Therefore, humanity will benefit from savoring-based interventions and their technological development and practice as well as from other savoring-based applications.

2.1.3.3 Cross-cultural research on savoring

Diener (2000) finds that there are cultural differences in the understanding of happiness when studying the subjective well-being of people in different countries. For example, in North America, the pursuit of happiness is a basic right, while in Buddhist culture, happiness is considered to be the result of suffering. Based on these findings, Lindberg (2004) of Canada has studied the cultural differences in savoring. By comparing the savoring of Japanese, Asian Americans and European Americans, it is found that Asians have lower savoring, and they will not take the initiative to enhance their positive experience. Differences also exist in the way of getting happiness. Individuals with an Oriental cultural background like to get happiness from interpersonal interaction and sense of accomplishment, while individuals with Western cultural backgrounds prefer to get happiness from leisure activities. In

addition, he also finds that individuals with an oriental cultural background have some unique savoring strategies; that is, they have to exert more effort and have to establish more connections with others (Lindberg, 2004).

Regarding the cultural attribution of differences in savoring strategies, Miyamoto and Ryff (2011) find that the dialectical thinking of the Eastern culture “Misfortune is where happiness depends, and happiness is where misfortune underlies” (Laozi, circa 485 BC) makes the Eastern people negative in their savoring strategies, preferring to balance positive and negative emotions, while Westerners are more inclined to maximize positive emotions and minimize negative emotions. The study by Miyamoto and Ma (2011) further shows that it is the difference in thinking caused by different cultural backgrounds that allows the Eastern and the Western individuals to adopt different savoring strategies in the face of positive events. Different from their counterparts with Western cultural backgrounds, subjects with Eastern cultural backgrounds tend to adopt means of suppressing positive emotions (inhibiting pleasant thoughts) to maintain the balance between positive emotions and negative emotions when facing positive emotions.

2.1.4 Savoring measurement

Savoring, as a positive subjective experience process, is measurable. However, savoring itself is extremely abstract. Its properties of lacking specific standards and having methodological defects all make it difficult to measure in an effective way. However, researchers have so far conducted in-depth discussions and analyses of the connotation of savoring and have compiled savoring measurement tools. At present, the most widely used savoring measurement tools are Savoring Beliefs Inventory (SBI) and The Way of Savoring Checklist (WOSC).

2.1.4.1 The savoring beliefs inventory (SBI)

Savoring beliefs refers to an individual's assessment of his or her ability to enjoy relevant experience. Therefore, the measurement of savoring beliefs is essentially a subjective measure of savoring ability, that is, the use of self-reported form to measure savoring ability. In certain measurement tools, the Perceived Ability to Savor Positive Outcomes Subscale (PASPO) is a five-dimensional single-dimensional scale (Bryant, 1989), which is currently used less. Bryant (2003) has developed a complete Savoring Beliefs Inventory (SBI), which is designed to measure individual ideas, consisting of three subscales of 24 questions: looking forward to the future, savoring the moment and recalling the past. When testing the savoring beliefs inventory, the subjects are required to make corresponding choices on the seven-point scale according to their actual situations. In the study using the savoring beliefs inventory, Bryant (2003) has found that the scores of each subscale and the total scores of SBI are significantly positively correlated with the intensity and frequency of happiness, but negatively correlated with negative emotions. In addition, the correlation between the subscales of looking forward to the future and recalling the past and the strength and frequency of happiness as well as negative emotions is far below the correlation between the subscale of savoring the moment and the strength and frequency of happiness as well as negative emotions. In terms of gender differences, men's scores and total scores in the three subscales are lower than those in women. This result suggests that women's savoring levels are higher than men's.

Bryant (2003) points out that experiencing a positive event does not mean that an individual has the ability to savor it. Instead, it is the case that when facing the

positive event, he or she should first generate the will to enjoy it, and then strengthen the will, and finally extend the will; that is, he or she can only possess the ability to savor when he or she can manage it, discover it, manipulate it, and maintain it. Therefore, savoring is regarded as an ability. The savoring beliefs inventory is focused on people's ability to perceive, or to manage a pleasant relationship in the past, present, and future. People need to be aware of their psychological needs for enjoyment and be aware of their deeper perceptions for attention and pleasure (Bryant, 2003). However, SBI cannot measure the performance of savoring. Bryant and Veroff (2007) have found that in terms of the ten types of savoring-enhancing strategies, the savoring abilities of individual subjects become different as they perform differently in their measurement of savoring strategies.

2.1.4.2 The way of savoring checklist (WOSC)

In order to understand the diversified savoring strategies that people experience in positive events, Bryant and Veroff (2007) point out that WOSC summarizes the taste strategies adopted by people in the face of positive events only to a certain extent. The development of WOSC is based on the Way of Coping Checklist (WOCC) developed by Folkman and Lazarus (1980), which is a multidimensional measurement tool used to assess the individual's use of savoring strategies. It has 10 subscales, including 60 questions that can be used to measure the use of 10 savoring strategies. Since the development of WOSC is based on a large number of investigations and conclusions, Bryant and Veroff (2007) believe that WOSC can cover the use of most people's savoring strategies. These 10 subscales broadly summarize the cognitive and behavioral savoring strategies that people use when facing positive events, making WOSC an effective tool for researching savoring

strategies. When the WOSC is implemented, subjects are required to first recall a recent positive event. By describing the positive event, the subjects can select the option that best suits their own situations on the ten-point Likert scale, providing the degree to which ideas and behaviors are in agreement described in the scale.

2.1.4.3 Children's savoring beliefs inventory (CSBI)

Bryant and Veroff (2007) designed the Children's Savoring Beliefs Inventory (CSBI) to study the savoring status of children based on the savoring beliefs inventory for adults. The CSBI is applicable to children, with the α coefficient being 0.84-0.93 in this group. Based on the order of time, CSBI is divided into three subscales: recalling the past, savoring the moment and expecting the future. Each subscale consists of 8 topics, with 24 questions, 12 of which are reverse scoring questions. The higher the CSBI score is, the higher the savoring is. CSBI requires children to self-evaluate on the seven-point Likert scale. The results of the inventory in children of Grades 5-7 are found to be different from that of the "savoring the moment" subscale for adults, who scored higher. There are no significant differences in scores between the three subscales on the part of children (Bryant & Veroff, 2007).

2.1.4.4 Other savoring measurement methods

In addition to the commonly used scales such as SBI and WOSC, researchers have also developed some other ways of measuring savoring. For example, the degree of pleasure in positive experience is used as a measure (Nelis, Quoidbach, & Hansenne, 2011), and the duration of time during which the subjects are savoring food is used as an indicator of savoring behavior (Quoidbach, Dunn, Petrides, & Mikolajczak, 2010).

2.2 Innovative Behavior

2.2.1 Definitions of innovation and Innovative behavior

2.2.1.1 Relation between innovation and creativity

Innovation and creativity are a related concept that is often used interchangeably in academic research (West & Farr, 1990). With regard to innovation and creativity, researchers have differences in understanding; or they believe that there is no need to deliberately distinguish between innovation and creativity, regarding them as a replaceable term; or they think that though innovation and creativity are structurally similar, they have essential differences (Scott & Bruce, 1994).

In 1950, American psychologists first discussed the concept of creativity, which led to an in-depth study of creativity. Creation usually refers to “making or creating new knowledge for the first time” (Woodman, Sawyer, & Griffin, 1993). Creativity refers to the production of new or useful ideas related to products, services, procedures or processes (Amabile, 1996; Shalley, 1991). This concept encompasses creative solutions to business problems, creative business strategies, or creative changes in work processes.

The concept of “innovation” was first proposed by the economist Joseph A Schumpeter (1912) in his “The Theory of Economic Development”. He believes that innovation is the creation of a new productional function, and innovation includes invention, innovation and the dual meaning of diffusion of innovation, among which innovation refers to the first application of new inventions (new products, new processes, new methods or new systems) to the economy. Thus, innovation also includes applications where products or processes are outside the organization.

Schumpeter (1934) developed the concept of innovation. He believes that innovation is an organization that uses resources efficiently and meets the needs of the market through innovative production methods, which contributes to economic development. Later, Kanter (1988) defines innovation from a process perspective, arguing that innovation is a multi-stage process involving the generation and implementation of ideas, with the necessary different activities and different individual behaviors at each stage. Van der Aa and Elfring (2002) point out that for the organization, anything that refers to a new concept, or an object or a gadget is innovation, though it is not necessarily the latest invention in the world.

The two concepts of innovation and creativity are often replaced by each other in research. The focus of creativity is on generating new ideas, while the emphasis of innovation is on the idea of practicing creativity (Robbins & Coulter, 1999). Creativity is the stage of creating innovative ideas that include both the creation of new ideas and the implementation of new ideas (Shalley, Zhou, & Oldham, 2004). Creation is the first stage of innovation, or the stage of creation of ideas, or the categorization of innovative behavior. Innovative behavior includes both the creation of an individual's own new ideas and the adoption of other people's new ideas for organization and work (Woodman, 1993). In addition, innovative behavior includes both the creation of new ideas and the implementation of new ideas (Shalley, et al. 2004). Creativity is the foundation of innovation, or the beginning of innovation; it is the necessary but not sufficient condition for innovation, while innovative behavior is the output of creativity, or the process of turning creativity into profit (Heunks, 1998).

Innovation refers to ideas that are beneficial to production, manufacturing, or implementation (Kanter, 1988). Creativity must be distinguished from general

production, manufacturing, or ideas (Mumford & Gustafson, 1988). Creativity is often understood as the first time to do something, or as building a new knowledge of knowledge (Woodman, Sawyer, & Griffin, 1993). However, in organizations, innovation is based on improving products and procedures. Some scholars have further analyzed the two concepts of "innovation" and "creativity." According to Amabile (1987), creativity refers to the creation of novel and potentially valuable ideas or things, including new products, new technologies, new management or new services. Kanter (1988) emphasizes in his research that creativity is a novel and practical concept, while innovation includes not only the creation of new ideas, but also the application of new ideas, products or technologies. Amabile, Conti, Coon, Lazenby and Herron (1996) argue that creativity refers to the novelty that individuals produce in any field, while innovation needs to be further put into reality. Leonard and Swap (1999) sees creativity as a process of expression that may be useful or novel, while innovation emphasizes the integration, consolidation, and characterization of novel meaningful products, processes, or services.

After continuous comparative analysis and improvement, most scholars have gradually reached an agreement on the two concepts of innovation and creativity (Scott & Bruce, 1994). They believe that creativity refers only to the presentation of novel and useful notions and ideas (Mumford & Gustafson, 1988), while innovation is the presentation or adoption of novel, useful ideas, and the implementation of such ideas (Kanter, 1988; Van de Ven, 1986). According to Kanter (1988), innovation is a multi-stage process, and generating new ideas is only one of them. During each stage of the process, innovation contains different activities required and different individual behaviors, while creativity can be seen as an early stage of innovation

(Scott & Bruce, 1994). Therefore, innovation is characterized by its non-continuous activities, rather than its discrete or continuous stages (Van de Ven, 1986).

At the same time, the degree of innovation and the driving factors of innovation can be divided into two categories: the first category can be divided by the degree of innovation; that is, innovation can be either a small transformation or a large breakthrough (Mumford & Gustafson, 1988). In this way, innovation is divided into two types. One is incremental innovation (incorporating or introducing existing knowledge and technology, or integration or internalization of them and then innovating or generating novel or core technologies that are different from existing technologies). The other is breakthrough innovation (developing new ideas, technologies, or methods that do not exist in the real world to creating a completely new product or service). The second category can be divided by the driving factors of innovation: one is the internal factor, which is innovation-driven (that is, innovation belongs to employees' spontaneous behavior) or the external factor (that is, innovation is actively advocated by the organization); the second is the openness of innovation (that is, innovation is prompted by the organization) or closedness of innovation (that is, innovation is implemented by employees themselves). Based on its internal or external factors and its openness or closedness categories, innovation can be divided into four paradigms: responsive innovation (the combination of external factor and closedness), expectative innovation (the combination of external factor and openness), contributive innovation (the combination of internal factor and closedness), positive innovation (the combination of internal factor and openness) (Unsworth, 2001). On the other hand, the concept of creativity can never be classified in such ways.

Based on the above-mentioned literature, most scholars regard creativity as

only a starting point for innovation, or an integral part of innovation. If innovative ideas cannot be turned into reality, having creativity alone is useless because it fails to create any real value. Therefore, this paper focuses on the innovative behavior of university teachers, rather than confusing teachers' creativity with innovative behavior.

2.2.1.2 Definition of innovative behaviour

Innovative behavior is the non-continuous activity of innovation (Van de Ven, 1986). The combination of actions at any time is the process of generating new ideas or products that involve the various manifestations of the interaction of individual traits or psychological attributes with contextual attributes (Tsai & Kao, 2004). It consists of three categories: organizational innovative behavior, team innovative behavior and individual innovative behavior.

Individuals are the most important element in organizational innovation and also are the basis for organizational innovation (Amabile, 1987; Shalley, 1991). There are three stages in individual innovative behavior: first, problem identification and the formation of ideas and solutions, followed by seeking support for new ideas and building support alliances, and then followed by establishing “models or paradigms” to complete the formation of ideas (Kanter, 1988).

The research on the concept of individual innovation behavior is multi-faceted. Some scholars define employee innovative behavior from the perspective of individual traits such as will, consciousness and behavioral tendency. Cuielford (1965) believes that employee innovative behavior is a unique ability of innovators. Kirton (1976) believes that individuals with different cognitive states have strong correlations with their behaviors. People who are good at adapting to their

surroundings often solve problems in an original perceptive framework. Innovators break rules and conventions and reconstruct their perceptive frameworks, thinking about problems and solving them from different angles. Based on this research, Hurt, Joseph and Cook (1977) argue that individual innovation is a willingness to makes changes.

Most researchers, including Kanter (1988), West and Farr (1989), Scott and Bruce (1994), Janssen (2000) and so on, define innovation based on the process of individual innovative behavior. Kanter (1988) argues that individual innovative behavior has three stages: first, problem identification and the formation of ideas and solutions, regardless of novel ideas or ideas from others; then innovative individuals seeking support for new ideas and building support alliances; finally, innovative behavior is achieved by investing in “innovative models or paradigms,” which can be interpreted, diffused, mass produced, applied to production or institutionalized. Relatively simple innovative activities can be completed by a single employee, and more complex innovations are usually fulfilled by teams with expertise, competence and excellent job skills. Kahn (1994) argues that employee innovative behavior is a process in which employees try to create new results cognitively, emotionally, and behaviorally. Amabile, Conti, Coon, Lazenby and Herron (1996) argue that innovative behavior includes both the creation of innovative ideas and the successful implementation of new ideas in practice. Drazin, Glynn and Kazanjian (1999) focus on how individuals try to perform innovative behaviors in complex contexts. They don't even care if this behavioral outcome is innovative, but directly define employee innovative behavior as the process in which employees engage in innovative activities.

Scott and Bruce (1994) define innovative behavior as a process in which an organization member can use organizational resources to generate, promote, and implement creative ideas. Employee innovative behavior undergoes multiple stages. First, the stage begins with an individual's perception of the problem and the formation of new ideas. Then the individual undergoes the experience in which he or she seeks assistance for creative ideas and then tries to establish a coalition of supporters. Finally, he or she practices innovative ideas and establishes innovative prototypes or models before producing commercialized products or services (Scott & Bruce, 1994). To sum up, employee innovative behavior is a complex process involving the generation, promotion, and practice of ideas. The innovation process is characterized by a combination of a series of non-continuous activities that have multiple stages, with different activities and innovative behaviors performed at different stages, and individuals can participate in these behaviors at any time.

Scott and Bruce (1994) study the innovative behavior at work as a complex behavior with three stages: the generation, promotion and realization of ideas. He believes that individual innovation begins with the generation of ideas, or the emergence of new and useful ideas. In any field, work-related problems are perceived due to disharmony or discontinuity, and the emergence of certain tendencies generates innovative ideas. The next step of innovation is to present ideas to potential partners or to build supporters who can provide the necessary backing. The final stage of the innovation process is to achieve innovative ideas by presenting a model that can be experimented or ultimately implemented in an organization, team or job post. Jassen (2000) defines innovative behavior as an employee's intentional innovation, as well as finalization and application of new ideas, which in turn leads to better performance

for employees.

Kleysen and Street (2001) also hold similar views, defining individual innovative behavior as the creation, introduction, and application of beneficial innovations to all individual actions at any level of the organization. Individual innovation is the starting point for organizational innovation. In their opinion, in terms of individual innovation, we should not just refer to the innovative ideas themselves; instead, we should include the coming up, content, promotion and development of innovative ideas so as to ensure that innovative ideas are effectively implemented. Kanera (1988) divides innovation into complex activities consisting of three phases of tasks, including the creation of new ideas, the search for support for new ideas, and the productization of new ideas. On the other hand, Yuan and Woodman (2010) define innovative behavior as a complex combination of behaviors, including the generation and introduction of new ideas (by themselves or from others), and the realization or fulfillment of new ideas. West and Farr (1989), while agreeing that innovative behavior is a process, tend to emphasize the interest orientation of innovative behavior. Their research defines innovation behavior as an employee's purposeful introduction or application of new ideas, new products, new processes, and new procedures into work or organization, including search for new technologies, new ways to achieve goals, and new applications, and seeking resources to implement new ideas, and so on. Amabile (1996) points out that individual innovation behavior includes individuals generating new ideas, generating new products, new methods, and new services. Lu and Zhang (2007) validated Kleysen and Street's (2001) new perspectives in individual innovative behavior, which divides individual innovative behavior into two stages, namely, the behavior of generating innovative ideas and the

behavior of implementing innovative ideas. Later, Gu (2011) also confirms the two stages of individual innovative behavior in the context of Chinese culture.

In summary, individual innovative behavior includes individuals generating new ideas, new products, new methods, and new services (Amabile, 1996). Individual innovative behavior refers to the behavior of generating innovative ideas and the behavior of implementing innovative ideas (Lu & Zhang, 2007; Kleysen & Street, 2001; Gu, 2011). The focus of this paper is on teachers' innovative behavior, which refers to individual-level ideas, products, processes, and solutions in teacher innovation behavior. This paper endorses the process of individual innovative behavior, and believes that innovative behavior is a multi-stage process from the generation of new ideas to the pursuit of solutions to the final realization of new ideas, and teachers can participate in any of the stages.

2.2.2 Relevant theories on innovative behavior

Ford (1996) proposes the theory of individual creative action, arguing that motivation determines an individual's actions to engage in creative performance or follow habits; among them, capacity beliefs and emotions are important motivational factors. Most scholars of affect theory believe that creativity is particularly susceptible to emotional influence, mainly because positive emotions provoke a cognitive change that stimulates creativity (Clore, Schwarz, & Conway, 1994). Fredrickson (2001) points out in his broaden-and-build theory that positive emotions will motivate individuals to respond positively to an unknown environment, bravely challenge and strive to achieve the desired creative performance. Fredrickson's (2005) expansion and construction theory argues that when individuals are in a state of pleasure and happiness, they have better cognitive flexibility and behavioral

tendencies, and these flexible thinking and behavioral tendencies will promote the generation of positive behaviors.

2.2.3 Relevant studies on innovative behavior

Research on the influencing factors of innovative behavior has gone through a process from the inside out. At the very beginning, attention is paid to which characteristics make an individual more creative and to how the innovative spirit of employees can be discovered and cultivated. Later, attention is paid to the organizational innovative environment and to the exploration of the interaction between individuals and the environment in innovation. The influencing factors of employee innovative behavior are divided into three aspects: individual factors of employees, internal factors of organizations and external factors of organizations.

2.2.3.1 Individual factors

In previous related studies, from the perspective of individual factors, the relevant factors affecting individual innovative behavior include individual emotional experience factors, cognitive factors, individuals' knowledge, ability and intrinsic motivation. Emotions or affects are significantly related to employee innovative behavior. Positive emotions enhance employees' diverse thinking, association and problem-solving skills, and thus develop better innovative ability (Oldham & Cummings, 1996). For the relationship between negative emotions and employee innovative behavior, research conclusions are different: Some argue that negative emotions of employees can hinder their innovative behaviors; and some believe that in a supportive organizational environment, negative emotions can also encourage employees to generate innovative ideas when they are solving problems (George & Zhou, 2007). Geng (2011) further empirically tested the positive impact of positive

emotions on employee innovation behavior in the context of Chinese companies and the negative impact of negative emotions on employee innovative behavior. In fact, individual cognitive factors include the ways individuals view, analyze and think about problems, such as divergent thinking or convergent thinking. Shalley, Zhou and Oldham (2004) point out that individual abstract thinking ability and cognitive ability are the premise and leading factors for employees' innovativeness. Individuals with creative cognitive style are more inclined to try risk-stimulating activities to seek the optimal solution, so individual abstract thinking ability and cognitive ability can predict employee's creativity. The knowledge that is owned when performing innovations specifically refers to the professional skills and innovation-related skills required to perform work tasks in a specific area of expertise (Amabile, 1987). Amabile (1987) points out that the knowledge and ability individuals possess can actively promote the innovation of employees. Stein (1989) finds that both memory and creativity have both positive and negative effects. There is a close relationship between the intrinsic motivation generated by employees and individual innovative behavior. Lu and Zhang (2007) have conducted research on whether employees' internal and external motivations and individual innovative behaviors were related. The conclusions were obtained that the internal motivation has a significant positive correlation with the innovative concept, and the internal and external motivations have a significant positive impact on the implementation of the innovative concept.

In addition, employees' creative self-efficacy, psychological empowerment, goal orientation, self-leadership, psychological security, psychological capital and other factors will also affect employee innovative behavior. Tierney and Farmer (2002) have pioneered and analyzed the formation and mechanism of creative

self-efficacy from the individual factors of employees and have verified the positive promotional effect of creative self-efficacy on employee innovative behavior and performance through empirical research; In the context of the company, Geng (2011) empirically has tested the significant positive impact of creative self-efficacy on employee innovative behavior. It is found that there is a significant positive correlation between psychological empowerment and employee innovative behavior (Chen, 2015), with creative self-efficacy playing an intermediary role. In addition, employees' learning goal orientation (Hirst, Van, & Zhou, 2009), self-leadership (Carmeli, Meitar, & Weisberg, 2006), psychological security, information sharing quality (Lee, Swink, & Pandejpong, 2011), psychological capital (Han & Yang, 2011) and other factors also significantly affect employee innovative behavior.

2.2.3.2 Internal factors of organization

Organization is a complex social system, and internal factors of organization promote employee innovative behavior (Amabile, 1996). Employee innovative behavior can be affected by many factors such as the organization's culture, compensation, resources, structure and strategy, technology and other organizational characteristics (Woodman, Sawyer, & Griffin, 1993), as well as leadership within the organization, support for innovation, the personal attributes of leaders, interaction among members, resources, etc. (Scott & Bruce, 1994). It can be said that there are relatively many research literatures on the internal factors of the organization that affect employee innovative behaviors. The internal factors of these organizations can be summarized as organizational compensation, organizational atmosphere, organizational culture, leadership support, and the combined effects of various factors.

Zeng and Zhou (2008) linked external rewards and employee innovative behavior. The study found that there is an “inverted U-shaped” relationship between external rewards and employee innovative behavior. Lian, Yang and Ma (2013) point out that the degree of matching between employees and organizations will significantly affect employee innovative behavior. In addition, the organizational atmosphere will profoundly affect employee innovative behavior (Wang, Xu, & Peng, 2013; Feifei & Jinghuan, 2015).

Support for innovation in an organizational climate (Scott, & Bruce, 1994; Zhao, 2011), encouragement and Listening (Shalley, 1991; Zhao, 2011), providing resources for innovation (Woodman, Sawyer, & Griffin, 1993), error management atmosphere (Scott & Bruce, 1994) all can positively motivate employee innovative behavior. Scott and Bruce (1994) demonstrate that support for innovation in an organizational climate has a significant positive effect on individual innovative behavior. Organizational culture will subtly allow employees to internally identify core values such as innovation within the organization, thereby stimulating employee innovative behavior (Hartmann, 2006). The results of Zhang and Lu (2010) show that employees' perception of organizational learning-promoting culture will have an impact on their innovative behavior, which will be achieved through the mediating role of employees' intrinsic motivation and extrinsic motivation. And different aspects of organizational learning-promoting culture can also make the intermediary role of internal and external motivation different.

Leadership factors play an important role in stimulating employees' individual innovative behavior (Scott & Bruce, 1994; Grong, 2009). Based on the theory of leadership members exchange in the social exchange theory, researchers

have verified the relationship between role expectations and employee innovative behaviors. The research results show that the fact that supervisors have innovative expectations for their employees can encourage employees to generate innovative behaviors, while harmonizing the relationship between supervisors and their employees at the same time. Scott and Bruce (1994) point out that the high quality of leadership members exchange will give members more autonomy and decision-making power, which makes them more likely to show innovative behavior. Jassen (2000) points out that when employees perceive leadership's support for innovative behavior at work, they are more willing to show innovative behavior at work. Further subdivision of the style of leadership finds that different leadership styles will have different impacts. Specifically, transformational leadership, deal-making leadership, real-life leadership, ethical leadership, entrepreneurial leadership, supportive or controlled leadership within the organization and other leadership-supported behaviors can affect employee innovative behavior. Transformational leadership is positively correlated with employees' individual innovative behavior (Gumuluoglu & Ilsev, 2009; Sharifirad, 2013; Pingjen & Peiyu, 2015). The relationship between deal-making leadership and employee innovative behavior is more complex because it can either positively influence employee innovative behavior (Ding & Xi, 2008), or is considered to be detrimental to employee innovative behavior (Zhou & George, 2001). Real-life leadership significantly influences employee innovative behavior (Shi & Yang, 2015). In addition, ethical leaders (Scott & Bruce, 1994) and entrepreneurial leaders (Chen, 2015) will also have a significant positive impact on employee innovative behavior. Supportive or controlled leadership has a diametrically opposite effect on employee

innovative behavior; that is, supportive leadership provides positive and constructive feedback on the work, and encourages employees to ask questions continuously, which helps to enhance employees' internal motivation (Deci & Ryan, 1985), which is positively related to employee innovative behavior (George & Zhou, 2007); controlled leadership closely monitors employees and requires strict adherence to rules and guidance, and does not allow employees to participate in decision-making, thus hindering employees' innovation reducing employees' intrinsic motivation and negatively impacting employee innovative behavior (Zhou & George, 2001).

Both organizational internal factors and individual employee factors have a comprehensive impact on employee innovative behavior. Organizational atmosphere, leadership support, organizational support, leadership membership, peer relationships, and many other organizational internal variables will be intertwined; at the same time, it will interact with individual employee factors to form a comprehensive impact of organizational innovation on employee innovation. This has a more complex impact on employee innovative behavior.

Leadership support and organizational support can both promote employee innovative behavior (Geng, 2011). Leadership empowerment positively affects employee innovative behavior, with creative self-efficacy and emotion playing a mediating role, and team innovative atmosphere playing a regulatory role (Geng, 2011). Real-life leadership will not only directly affect employee innovative behavior, but also indirectly affect employee innovative behavior through the intermediary role of psychological capital (Han & Yang, 2011) and psychological empowerment (Shi & Yang, 2015). Leadership Members exchange can play a mediating role between the relationship between real-life leadership and employee innovative behavior, and can

also regulate the relationship between real-life leadership and employee innovative behavior. In the relationship between ethical leadership and employee innovative behavior, psychological capital will play a partial intermediary role, and leadership members exchange will also regulate the relationship between ethical leadership and employee innovative behavior (Scott & Bruce, 1994). In the relationship between entrepreneurial leadership and employee innovative behavior, psychological empowerment will play a full intermediary role; at the same time, reform commitment to employees will regulate the relationship between entrepreneurial leadership and employee innovative behavior, and in the context of giving commitment to employees, entrepreneurial leadership is better in predicting employee innovative behavior (Chen, 2015).

Moreover, the organizational climate has a greater impact on employee innovation, and the impact ranges from leadership, reward systems, organizational structures and processes (Sethia, 1989), or from organizational support, leadership support, team support, work support, etc. (Zhao, 2011), or from peer support, supervisor support and organizational support (Pan, 2014). At the same time, internal motivation (Lian, et al., 2013), knowledge sharing (Zhao, 2011), organizational identity (Pan, 2014) play a mediating role between organizational innovative atmosphere and employee innovative behavior. Leadership membership and team membership are positively related to employee innovative behavior, while organizational innovational atmosphere acts as an intermediary for mediating variables (Sun, Shi, & Zhang, 2009). Leadership members exchange, perceived innovation support positively affects employee innovative behavior, with internal motivation playing a mediating role (Wang & Luo, 2010).

2.2.3.3 External factors of organization

The fact that individuals have more external relationships outside the organization will benefit employee innovation within the organization (Hoegl, Parboteeah, & Munson, 2003). When communicating with professionals outside the organization, external factors outside the organization are beneficial to employee innovative behavior inside the organization (Kimberly & Evanisko, 1981). When often having contact with external factors outside the organization, employees can apply innovative practices in other areas of expertise to their areas of expertise, expand problem-solving ideas and generate innovative behavior (Perry-Smith, 2006). Moreover, the social resources outside the organization also affect employee innovative behavior within the organization (Xue & Ren, 2006). For example, the quality of the relationship between team members and external teams also has a positive correlation with individual innovative behavior (Scott & Bruce, 1994).

Based on above studies, this research recognizes that employee innovative behavior is the result of interaction between personal factors and organizational factors, and the psychological state of employees is the most important factor affecting employee innovative behavior (Lian, et al., 2013; Wang et al., 2013).

2.2.4 Measurement of innovative behavior

In response to the relevant theoretical perspectives on individual innovative behavior, researchers have developed a variety of measurement scales for employee innovative behavior and have formed different views on their structural dimensions.

2.2.4.1 Single-dimensional structure and scales for employee innovative behavior

- (1) Scott and Bruce's (1994) six-item scale

In 1994, in response to employee innovative behavior, based on Kanter's (1988) innovative stage theory, Scott and Bruce (1994) compiled this scale after interviews with corporate executives, which is mainly used to measure the new techniques, new procedures, new manufacturing process, new skills, or creative products which corporate employees have developed in the overall innovation process. In addition, this scale is also used for measuring the results of seeking supporters for innovation and implementing innovative ideas. The scale has a total of six items, including five specific items and one summary item. The scale is mainly used for the subjective evaluation of employees' self-innovative behavior, and its reliability and validity are relatively high. Specifically, the Cronbach's α coefficient of this scale is 0.89, which has a high degree of validity and reliability and is the most widely used.

(2) Jansen's (2000) nine-item scale

Janssen (2000) points out that employees' innovative work behavior will go through three stages, namely, production, action, and realization. However, the data from empirical studies prove that these three stages are highly intrinsically related. In the same year, Janssen summarized the above three stages into one dimension, which constitutes a single dimension of employees' innovative work behavior scale.

(3) George and Zhou's (2001) 13-item scale

On the basis of previous research results, George and Zhou (2001) produce a new scale for the evaluation of employee innovative behavior. There are 13 major questions, mainly based on the visual perspective of the leaders to judge the employees' performance in innovative behavior.

(4) Other scales for measuring innovative behavior of employees

Other scales include three-item scale created by Cummings and Oldham

(1996) and the nine-item scale compiled by Tierney and Farmer (1996). The contents of these two scales are filled out by supervisors who are familiar with the employees, so as to reflect the employees' innovative performance and then use the scales to evaluate employees' overall level of innovation.

2.2.4.2 Two-dimensional scale of employee innovative behavior

Huang (2004) has conducted an empirical study in Taiwan using the employee innovative behavior scale compiled by Kleysen and Street (2001). The results show that employee's innovative behavior is represented by two dimensions, namely, generating innovative ideas and implementing innovative ideas. Generating innovative ideas means that employees are broadly seeking and discovering more opportunities for innovation, creating new ideas or solutions for improving the quality of their products, technologies, processes and services. The implementation of innovative ideas means that employees can strive to achieve innovation in the enterprise by persuading or influencing their colleagues and mobilizing resources within the enterprise to support their own adventurous and challenging innovations. Generating innovative ideas is generally the basis for employee innovative behavior, and implementing innovation ideas is an important part of employee's innovative behavior, both of which are important factors for employees to generate innovative performance.

2.2.4.3 Four-dimensional scale of employee innovative behavior

The four-dimensional scale of employee innovation behavior was compiled by Hocevar and Bachelor (1989), with four subscales including hobbies, consciousness, imagination, and attention. The inventory has a high degree of reliability and validity.

2.2.4.4 Five-dimensional scale of employee innovation behavior

Kleysen and Street (2001) argue that when measuring employee innovative behavior, other researchers only consider the individual level of the employee; they fail to analyze and summarize the full meaning of the innovative behavior. To this end, Kleysen and Street (2001) has reviewed and summarized more than 200 innovative activities involved in 28 articles, and summarized the five dimensions of employee innovative behavior, namely, opportunity seeking, concept creation, concept evaluation, support and application of concept, and developing a five-dimensional scale. The empirical data shows that although the scale passes the reliability test, it lacks validity.

Most of the above employee innovative behavior measurement scales are employee subjective self-assessment measurement scales. These employee innovative behavior measurement scales include single dimension and multiple dimensions. In other words, most researcher study and analyze the structural dimensions based on the formation and development stages of employee innovative behavior. In addition, there are other scales of measurement: expert assessment (Perry-Smith & Shalley, 2003) and mission measurement (Tierney, Farmer, & Graen, 1999).

In summary, there is still no consensus on the structural dimensions and measurement of employee innovative behavior. The single dimension scale regards innovative behavior as a result, while multidimensional scales consider innovation to be a process. Employee innovative behavior is an activity in which employees create, introduce, and apply useful new things in an organization. Therefore, this study selects the six-item single-dimensional scale according to Scott and Bruce (1994), which has been translated and revised according to the characteristics of Chinese

cultural background by Zhang and Shi (2009). The scale is widely used in China with high recognition.

2.3 Creative Self-Efficacy

2.3.1 Definition of creative self-efficacy

Self-efficacy (Bandura, 1997) is derived from social cognition theory and is an important part of contemporary psychology. It is a very effective concept for predicting human behavior and also an important factor for explaining human behavior. Its importance also lies in the field of creativity research.

The theory of social cognition mainly emphasizes that human beings are affected by the interaction of internal personal factors (cognition, affection), behavior and external environment. In this process, the perceived self-efficacy of individuals has a decisive influence on individuals, and cognitive activity represents the individual's self-efficacy; it is the individual's mental products through such cognitive operation process and becomes the driving force for individual performance (Hong, Huang, & Lin, 2008; Bandura, 1997). Self-efficacy is concerned with the impact of personal beliefs on their lives. This core belief is based on human motivation, performance and well-being (Bandura, 1997, 2006). Bandura (1986) defines self-efficacy as a self-judgment ability that people judge whether they have the ability to perform the necessary action plans and achieve the set goals. It is not a possessive skill, but refers to a belief in how individuals can make the most of their skills. In short, self-efficacy is the individual's belief in whether or not he or she can achieve a specific task.

Tierney and Farmer (2002) extends the concept of creative self-efficacy

based on social cognition theory, and defines that the emergence of creative ideas requires the support of individual inner strength to encourage themselves to adhere to the intention of action and translate it into belief in their engagement in creative work. In other words, it is an individual's assessment of his or her ability and confidence to produce a creative work for a particular task. Moreover, Tierney and Farmer (2002) found that creative self-efficacy can directly promote employee creative behavior, which is more explanatory than employee self-efficacy in employee creative behavior. In addition, belief in creative behavior and belief in self-creative ability will affect individual creativity, so individual self-efficacy is the main factor for individuals to decide whether to engage in innovative behavior. Therefore, creative self-efficacy has an important impact on an individual's ability to perform a specific task, and creative self-efficacy can become an important driving force to motivate an individual to engage in creative performance.

Runco (2004) emphasizes educational goals beyond cognition. He even argues that in creative thinking, ego-strength should be given more attention to than cognitive skills. This is because creative efforts need to rely on the motivation of such internal support to motivate individuals to accept challenges, and then to bring breakthrough ideas to work tasks (Amabile, 1983; Bandura, 1997). In fact, creative self-efficacy is similar to self-strength in concept. It also provides the motivation when a person encounters a challenging situation, while a strong belief will increase the level of persistence and motivate the individual's creative performance (Bandura, 1997). When self-judging their own new and appropriate ideas, solutions, and behavioral abilities (Beghetto, 2009), creative self-efficient individuals believe in their own creative abilities (Choi, 2012), and this belief is an important motivation for

achieving creative performance. (Chang, Wang, & Lee, 2015). In addition, self-efficacy is an important mechanism for self-regulation in social cognitive theory because self-confidence allows individuals to fully develop their abilities and use the resources they need to succeed in perfectly accomplishing the tasks they should achieve in a particular situation so as to gain positive experience. (Bandura, 1997).

Lin (2003) points out that creative self-efficacy is the individual's belief in whether the self produces innovative products. Beghetto (2006) defines creative self-efficacy as the degree of confidence with which students can independently complete their academic tasks. Combining self-efficacy with internal and external control theory, Hong, Huang and Lin (2004) believe that creative self-efficacy is the belief of students in their ability to demonstrate creativity on specific tasks. Based on Tierney and Farmer's (2002) definition of creative self-efficacy Gui and Zhou (2016) define the creative self-efficacy of college students as "the belief that individuals have creative performance in the process of learning;" that is, in the process of learning, creative ideas are generated to solve learning difficulties and achieve confidence in learning objectives.

Gu and Peng (2011) define creative self-efficacy as that "it refers to the individual's belief in whether or not he or she can have creative performance at work, that is, the confidence in assessing whether he or she have the ability to creatively complete tasks, achieve work goals, and overcome difficulties or challenges creatively." Such a belief in self-efficiency not only targets the results of innovative behavior, but also targets the process of innovative behavior. Some researchers believe that creative self-efficacy refers to the ability of individuals to believe in their own creativity, and this belief is an important driving force for achieving creative

performance (Lin, Zhao, & Qiu, 2010; Choi, 2004, 2012; Malik, Butt, & Choi, 2015). Chang and Xiao (2016) believe that creative self-efficacy is the self-judgment and belief of personal imagination and the ability to generate novel and appropriate ideas, solutions, and behaviors.

According to the above researchers' definition of creative self-efficacy, this study defines creative self-efficacy as the belief in oneself being able to achieve success for a certain goal based on individual creative behavior. In short, the belief that an individual has the ability to think creatively or to produce a creative product in order to achieve a certain goal is creative self-efficacy.

2.3.2 Relevant theory of creative self-efficacy

From the perspective of self-regulation in social cognition theory, self-efficacy plays an important role in the self-regulation system (Bandura, 1986). Bandura (1997) argues that individuals can observe self-efficacy through cognitive, motivational, emotional, and optimistic ways to regulate their individual behavior. The relationship between motivation and behavioral performance is mediated through self-efficacy (Relich, Debus, & Walker, 1986; Schunk & Gunn, 1986). Tierney and Farmer (2002) combine self-efficacy theory with Amabile's (1998) creativity theory to propose a concept of creative self-efficacy, and their research results verify that special self-efficacy beliefs are directly related to employee creativity and suggest that although general self-efficacy and personal creativity are positively correlated, they cannot be directly analogized to the measurement of self-efficacy in other fields, and creative self-efficacy is more predictive than general self-efficacy in employee creative behavior. Tierney and Farmer (2002, 2004) have also confirmed the independent existence of the concept of creative self-efficacy. On the other hand,

creative self-efficacy comes from the theory of self-efficacy in social cognitive theory, and it is believed that self-efficacy theory is the causal relationship between physiology, behavior, and the interaction between environment and cognition (Bandura, 1986). In particular, the higher the individual's creative self-efficacy is, the more he or she believes that he or she can accomplish the task, enhance the motivation to achieve the task, and avoid doing things that they believe have exceeded their ability while choosing to do what they believe is within their ability (Wood & Bandura, 1989a, 1989b). Self-efficacy is one of the important conditions for discovering new knowledge and producing creative products. At the same time, self-efficacy is divided into special self-efficacy and general self-efficacy. Special self-efficacy will produce effects in specific fields or situations and individual performance in such fields or situations contains a certain degree of predictive power and is an important mechanism for regulating motivation and behavior (Bandura, 1982). Therefore, self-efficacy in the creative field is different from the general self-efficacy. This is because the creative field requires more special knowledge and skills (Hong, 2004). Thus, creative self-efficacy is more relevant to personal creation, so creative self-efficacy is more supportive of the individual's belief in continuing creative behavior.

Tierney and Farmer (2002) argue that the concept of creative self-efficacy is similar to the belief in creativity, but different from self-esteem and self-confidence. Self-esteem and self-confidence involve broad-based feelings, while creative self-efficacy involves specific judgments of creative actions. Tierney and Farmer (2004) explore employee creativity based on the Pygmalion model. Research has found that when employees feel that they have strong creative ability, that is, when

they have a high degree of creative self-efficacy, they will show more creativity in work. This finding also supports what Bandura (1997) advocates; that is, self-efficacy means the creativity that produces necessary actions.

Mathisen and Bronnick (2009) also point out that there is a positive relationship between creative self-efficacy and creative performance. The experience in creative self-efficacy training will change the individual's belief in self-creative ability and maintain a longer time to promote the improvement of creative self-efficacy. At the same time, improving creative self-efficacy can help individuals become more creative in their behavioral activities (Mathisen & Bronnick, 2009). Therefore, creative self-efficacy is the key to generating creative behavior, and it can increase the creativity of individuals through the improvement of creative self-efficacy. From the above theory, creative self-efficacy allows individuals to self-assess whether they have the ability to complete a specific task or to make creative products or have the ability to continuously participate in creative activities. At the same time, creative self-efficacy is also a kind of belief, or it also refers to the individual's confidence in the production of creative works or creative thinking, and it can influence the individual's behavior, ways of thinking, or motivation. In addition, creative self-efficacy can also enable individuals to understand their creative performance. In short, creative self-efficacy has become an important factor for researchers to explore individual creativity and individual creative behavior.

2.3.3 Relevant studies on creative self-efficacy

Individual creative self-efficacy plays an important intermediary role in the psychological control of an individual's cognition, motivation, attitude, and emotion (Bandura, 1982, 1986). Amabile, Barsade, Mueller and Staw (2005) point out that

emotion is a psychological process related to creative thinking. Because it is different from intrinsic motivation, emotion is regarded as an important factor in the process of creativity-related process. Emotion includes two elements: emotional state and emotional traits. Runco (2008) points out that the challenges of inspiring creativity have different terms, including adversity, problems, gaps, tensions, disorders and challenges. In addition, through positive attitudes towards learning and work, happiness and creativity can be promoted. The problem of “being unsatisfied” is due to the results of personal interpretation. Runco (2008) proposes that by learning to savor life and work, individuals can foster positive attitudes to interpret problems and challenges to promote personal well-being while inspiring creative adaptation (Gaggioli, Mazzoni, Milani, & Riva, 2015; Hargrove, Nelson, & Cooper, 2013). Fix (2003) points out that the degree to which individual enjoy themselves has a significant impact on their psychological well-being, personality, cognitive ability and creativity, while self-efficacy is also a kind of individual cognitive ability. Therefore, playfulness may affect self-efficacy. It is true that previous literature has discussed related research on motivation, but there is little research on creative self-efficacy. Only Zheng (2014) explores the teachers’ personal playfulness and teachers’ creative self-efficacy with middle school teachers in Wuhu County, China, as research subjects. It is found that playfulness has a positive correlation with the self-efficacy of creative teaching and that playfulness is an intrinsic motivational individual tendency, and teachers with strong self-efficacy will feel the influence of personal inclination. Therefore, motivation of playfulness is influenced by the intrinsic motivation of the individual, helping teachers to focus on and enjoy creating teaching so as to increase their confidence in self-creation and in trying new things, thereby enhancing creative

self-efficacy. Therefore, motivation of playfulness may have an impact on creative self-efficacy.

In the past, Tierney and Farmer (2002, 2004) found that creative self-efficacy significantly predicted creative performance. Wang, Zhang and Martocchio (2011) found a relationship between role blur and creativity. That is, role blur is conducive to work creativity, and creative self-efficacy plays a significant intermediary role. Li and Wu (2011) found that the creative self-efficacy of college students is partly related to the relationship between optimism and innovative behavior; and college students' psychological well-being and environment can be integrated into one, and the learning model that predicts scientific imagination through self-efficacy can be predicted. (Xu, Liang, & Xu, 2014). Liang and Chang (2014) found that college students' creative self-efficacy directly affects their imagination, and intrinsic motivation indirectly affects students' imagination through creative self-efficacy. If an individual perceives the positive feedback of important others, their creative self-efficacy will have a strong predictive power for the individual's creative life experience (Hong et al., 2008). It can be seen that creative self-efficacy has a positive predictive effect on creativity and creative performance.

Lin, Zhao and Qiu (2010) found that creative personality traits affects creative teaching behavior through creative teaching self-efficacy. Creative self-efficacy can directly affect innovative activities, and creative self-efficacy plays a positive role in adjusting the relationship between teacher support behavior and creative thinking (Li & Yu, 2011). In the study of the relationship between performance compensation and employee innovative behavior, performance compensation adjusts employee innovative behavior through creative self-efficacy

(Gu & Wang, 2014). Creative self-efficacy exerts a complete intermediary effect on creative time pressure and there exists a significant relationship between emotional contradiction and creative performance (Hong, Wang, & Cai, 2008). Gao and Wang (2016) found that innovative personality can indirectly predict the level of innovative ability through creative self-efficacy. Jaussi and Randel (2014) have explored the antecedents and processes that influence the creativity of the organization, such as incremental creativity and radical creativity. The results show that creative self-efficacy is only positively correlated with radical creativity. Chong and Ma (2010) have explored the relationship between creativity and professional self-efficacy, and find that personal factors and work environment can affect creative self-efficacy. Chang (2017) found that college students' aesthetic experience has direct effects on creative self-efficacy and creativity, and teacher creativity influences students' creative self-efficacy through aesthetic experience. Lin (2013) found that college students' savoring has a significant positive impact on creative self-efficacy. It can be seen that if individuals know that they are capable of facing any challenge and decide to put their minds to complete the task, they can have an important influence on their creative beliefs and creativity.

In terms of the regulatory effect of creative self-efficacy on personal creativity, the execution of creative solutions requires personal confidence and ability. The creation of creativity, though partly due to the contribution of creative individuals, is also subject to the influence of the environment and culture surrounding the individual. Environment plays a role in gestation, promotion or inhibition of personal creativity (Amabile, 1996; Csikszentmihalyi & Wolfe, 2000). Studies by Tierney and Farmer (2002) shows that creative self-efficacy can positively predict innovative

behavior. Hunter, Bedell and Mumford (2007) have shown that environmental factors can predict creative behavior, and that the individual's personal traits are related to his or her creative performance, but the traits and performance displayed by individuals are also their responses to organizational environment.

Liang and Wei (2013) have shown that organizational climate has a positive relationship with self-efficacy. Hirst, Van Knippenberg and Zhou (2009) found that the team context can enhance individual creativity by encouraging individual learning; Xiao (2011) found that school's innovative climate and teachers' intrinsic motivation play a significant positive effect on creative teaching performance. Conversely, organizational climate with no support for individuals will have a negative impact on individual creativity (Choi, Anderson, & Veillette, 2009). Therefore, when individuals identify self-efficacy, they will actively judge their own and environmental resources and constraints, such as whether they have enough knowledge, information, relevant experience and support sources, and then form a reasonable recognition of their own ability based on this judgment (Gist & Mitchell, 1992). Chen and Guo (2013) found that team learning behavior has a positive adjustment effect on the relationship between learning trends and creative teaching performance. Therefore, individuals will perceive changes in environmental support and context, interpret their own experiences, and reflect their behavior in a special way.

2.3.4 Measurement of creative self-efficacy

Runco (2004) emphasizes goal-oriented cognitive education. He argues that in creative thinking, self-strength should be paid more attention to than cognitive skills. This is because self-strength will strengthen students' self-confidence and let

students act by follow their own inner interests. Similar point of view is put forward in the study of self-efficacy. Beghetto (2006) shows that both teachers and classroom environments influence students' creative self-efficacy. Self-efficacy will give them confidence, because creative talents have become part of their self-images and make them believe in their own creativity. Richards (2007) also believes that all creativity originates at the individual level, and becomes a reality through the individual's external interpretation, decision, and intention, so the individual's externally stereotypic impression, or the results of the past, will affect self-creative belief.

Therefore, an individual's assessment of self-efficacy is often influenced by the environment, his or her own capabilities, and the task itself (Bandura, 1997). Especially for students, students' creative behaviors may often need to endure putdowns and face negative languages, rather than like their academic self-efficacy or work self-efficacy, which makes environmental goals consistent with individual internal needs. The concept of teacher self-efficacy or creative teaching self-efficacy (Lin & Qiu, 2008) also has such characteristics, which, in addition to the inclusion of teachers' evaluation of their own teaching power, also cover their perception of the external environment. That is, creative self-efficacy also covers beliefs in one's own abilities to challenge the external environment.

Tierney and Farmer (2002) proposed that the creative self-efficacy connotation includes three facets: generating ideas, solving problems and refining or improving others' ideas. They also compiled a creative self-efficacy questionnaire to conduct research on creative self-efficacy and employee creative behavior. The questionnaire has four topics that require employees to describe what they think about their creative behavior. Lin and Qiu (2008) explored the teacher's creative

self-efficacy and teaching behavior, and developed the self-efficacy model of creative teaching based on the creative self-efficacy concept developed by Tierney and Farmer (2002). The scale includes teachers' positive creative self-efficacy beliefs, negative creative self-efficacy beliefs and beliefs in the external environment. Hong and Lin (2004) targeted students and incorporate the concepts of internal control and counterbalance into the construct of creative self-efficacy and developed the creative self-efficacy inventory containing "creative thinking beliefs," "creative products beliefs," and "counter-negative evaluation beliefs." The creative self-efficacy scale developed by Xu, Jian and Cai (2008) also includes "creative thinking beliefs," "creative finished-products beliefs," and "external negative evaluation beliefs".

Hong and Huang (2008), based on the constructs of the creative self-efficacy scales of Hong and Lin (2004), developed the creative self-efficacy scales for students containing primary constructs and secondary constructs by integrating the three abilities inherent in creativity: originality, flexibility and fluency into the scales. Lin and Lin (2007) explored the creative self-efficacy of primary school students, including subscales on creative products beliefs, creative thinking strategies, and counter-negative evaluation beliefs.

Hill, Tan and Kikuchi (2008), based on Beghetto's (2006) questionnaires, combining Amabile's (1990) three-component creative model, compiled a high school student's creative self-efficacy scale, which includes ability self-efficacy, cognitive self-efficacy and task self-efficacy. Yang (2007) compiled a creative self-efficacy scale for college students, whose subscales include sensitivity efficacy, flexibility efficacy, originality efficacy, and fluency efficacy.

Abbott (2010b) combines Torrance's diffusive thinking theory with

Csikszentmihalyi's creativity system theory to construct a creative self-efficacy energy inventory, which includes two questionnaires: creative thinking self-efficacy and creative performance self-efficacy. The creative thinking self-efficacy questionnaire contains four sub-scales of fluency, flexibility, originality and precision. The creative performance self-efficacy questionnaire includes three sub-scales of domain, learning and personality. Based on the connotation of the creative self-efficacy scale proposed by the above researchers, a conclusion can be drawn that when discussing creative self-efficacy, "creative thinking belief", "creative finished belief" and "counter-reverse evaluation" should be paid great attention to. Only in this way can we effectively understand the impact of creative self-efficacy in research.

Hong, Wang and Cai (2008) explored the influence of important others' feedback and life experience on the effect of creative self-efficacy and creative motives of college students. It was found that the creative self-efficacy is better related to motivational variables, and the individual perception of important others' positive feedbacks via the variables of creative self-efficacy, internal and external motivations of creativity all have positive effects on creative life experiences, among which individual creative self-efficacy has the strongest predictive power for creative life experience.

Chen and Guo (2013) take teachers as the research object and explore the influence of achievement goals on teachers' creative teaching through creative self-efficacy with the team's learning behavior as a cross-level adjustment effect. The research results show that the achievement goals will affect creative teaching performance through creative self-efficacy, in which learning trends, learning escaping and performance tendencies have positive mediating effects, while

performance evasion has negative mediating effects. Therefore, it can be found that creative self-efficacy has an intermediary effect between experience and behavior, and it also means that individual creative behavior can be enhanced through the improvement of creative self-efficacy. He (2014), through the characteristics and empirical research on postgraduates' innovative self-efficacy, using exploratory factor analysis, found that postgraduates' creative self-efficacy is in fact a four-dimensional construct that includes constructing knowledge systems, selecting creative methods, applying creative methods, and completing creative tasks.

After sorting out the research on creative self-efficacy, it is known that creative self-efficacy is an important factor in the composition of creativity. Studies have found that creative self-efficacy has a positive predictive power for creativity or creative performance, and that creative self-efficacy may have a mediating effect in the process of individual creativity and creative behavior, which means that in the process of individual creativity, creative ideas and confidence are needed to lead to creativity. Hong and Lin (2004) compiled the student's creative self-efficacy scale. The scale includes three factors: "creative thinking belief", "creative finished product belief" and "counter-negative evaluation belief". Creative thinking belief refers to the belief that when facing a problem, one believes that one can think of multiple solutions or think of ways that other people cannot think of. The idea of creative finished products refers to the belief that individuals can make a fresh or ingenious work, and the counter-negative evaluation belief refers to the belief in whether one has the ability to counter negative feedback given by the external environment.

Cai (2013) revised the 7-item creative self-efficacy scale suitable for Chinese cultural background with reference to the scale compiled by Carmeli and Schaubroeck

(2007). The items include: I can use creative ways to achieve most of the goals I set for myself; I believe that I can invest in the most creative ways I want to do; I am confident that I can creatively complete many different tasks. This paper uses the 7-item creative self-efficacy scale revised by Tsai (2012) because this scale is in line with the definition of creative self-efficacy in this study and is consistent with the Chinese cultural background. Therefore, this scale is beneficial in exploring the research results.

2.4 Aesthetic Experience

The scope of aesthetics is relatively wide. The research objects include artistic creation activities, definitions and comments of artworks, social functions of art, aesthetic attitudes and aesthetic experiences (Liu, 1995). From the aesthetics itself, aesthetic experience involves three categories: artistic creation, works of art, and art viewers. In fact, aesthetic experience also includes social and cultural aspects, and thus becomes an important research topic (Lin, 2009). People's thoughts on aesthetic experience usually refer to the experience of investing in art or nature. Aesthetic experience is like a panacea for people, being able to heal the wounds of the soul. It is a pure human heart, and it is also of a beautiful moral or social value (Tomlin, 2008).

2.4.1 Definition of aesthetic experience

The word "aesthetic" is derived from Greek, meaning the perception of beauty, which is different from the perception of understanding. "Aesthetic experience" is listed as one of the six aesthetic concepts of the Western culture, and its source can be traced to Greek Pythagoras (Liu, 2001). Baumgarten (1750) regards the perception of beauty as the cognition of "beauty" and conducts cognitive research

on beauty in the name of “aesthetica”. He believes that human cognition is divided into two parts: One is perceptual knowledge and the other is conceptual knowledge. The theory of studying conceptual knowledge is logic, and the theory of studying perceptual knowledge is aesthetics (Zhu, 1993). Welsh (2003) pointed out that aesthetics is not limited to art; it in fact refers to any aesthetically pleasing behavior or aesthetic conditions in daily life. H. S. Broudy pointed out that the construction of a logically sound "educational aesthetics" theory must first define the meaning of aesthetic experience (Lin, 2009).

With regard to the researchers' interpretation of the aesthetic experience, Dewey (1934) proposes that the aesthetic experience is the result of the interaction of the organism with its environment in order to adapt to survival, or the interaction between the viewer's subject's thoughts and feelings and his object is a kind of interaction. The integrity of this interaction depends on the perception and understanding of the viewer (Aldrich, 1978); Bosanquet (1968) considers the aesthetic experience to be a happy feeling, or a feeling of something pleasant; the viewer forms aesthetic perception of artistic works, and our inner life is formed through the sharing of aesthetic forms we can experience (Eisner, 2002).

Sir Herbert Read (1964) thinks that Hume's most famous words are: "beauty" does not exist in the things themselves, but in the minds of contemplation. When the aesthetic subject begins to express emotions on the aesthetic object, the mind is not a blind emptiness, but a contemplative monologue. The starting point of the aesthetic experience lies in the confirmation of one's life and practice through sensory perception and the enjoyment of the aesthetic object, thus generating spiritual satisfaction and joy. Through perception of and the appearance of the aesthetic object,

one can feel and understand some more deep and essential meaning of the object. This is the difference between aesthetic perception and general perception.

Zeng (2005) pointed out that if a person's aesthetic sense of mind is fully awakened and his creativity is strong, he or she may be able to see the beauty of the object without being restricted by the object. At this time, the object is the realization of the beauty, and the awakening of the soul is the main cause of the beauty. Maquet (1986) believes that the aesthetic experience is made through the contact with the subject, the viewer, and the object with aesthetic significance, while Chen (1995) believes that the aesthetic experience is one that people experience when they engage in aesthetic activities. The process of combining the subject and the object is the process that takes into account the relationship between subjectivity and objectivity. Therefore, through the object, one can see the beauty of all things by awakening the beauty of the mind in his or her own thought.

Zhu (1993) argues that aesthetic experience is "the intuition of the image", which means that the "intuition" removes the will and abstract thinking, and the image does not take the meaning of activity as the destination. Therefore, the aesthetic experience is the experience that is completely isolated or insulated from cognition, science, morality and practicality (Lin, 2009). Tatakiewicz (2001) also believes that aesthetic experience is only a kind of care or meditation, and it is an observation of nothing for something, and the experience generated during observation may be used in later aesthetic creations.

J. Dewey points out that aesthetic experience is part of life experience; it is a direct experience with unique personal experience, and it is also the ultimate expression of "a complete experience." The experience contains the striking

impression of interaction of doing and undoing, self-sufficiency, complete self-feeling, achievement of internal unity, emotional immersion and integration (Dewey, 1934). Chen (2005) believes that when experiencing individuals are immersed in an event, sincerely and intentionally participating in the event, they integrate their own rationality and sensibility, achieving a unified experience. After the experience, they have self-sufficiency and perfect feelings, thereby resulting in aesthetic experience. For example: In real life, when we participate in something with sincerity, such as solving a problem, playing a game, writing a book, we can bring us a vivid impression and a sense of perfect satisfaction after finishing it; in other words, the target experienced in life has a sense of beauty and become a “complete experience”, and each complete experience reconciles and interacts to become an aesthetic experience. Vessel, Starr and Rubin (2012) point out that aesthetic experience is a combination of individual perception and emotional response. Chen (2013) points out that aesthetic experience is from the observation of people and things that people experience in their daily lives. It is the transformative experience that comes after exploring, imagining, and introspecting. Helmut, Benno, Andries and Dorothee (2004) argue that aesthetic experience originates from the aesthetic process of a gift, or special interest of one’s psychology. They suggest that aesthetic experience includes the process of cognition and emotion and propose a model of aesthetic judgment. The model divides aesthetics into works of art and emotions. Through the detection, implicit experience integration, clear classification, cognitive mastery, and evaluation of five different processes, aesthetic judgment and aesthetic emotions are used as two output modes. Aesthetic judgment is derived from cognitive evaluation, while aesthetic emotion is the result of this model. Osborne (1970) pointed out that when

people experience beauty, they lose the sense of time, place and feeling of the body; they are completely in the present. Csikszentmihalyi (1990) further clarified the aesthetic experience, that is, when you focus on the things you are engaged in, you will feel a deep and happy experience. Chen (2005) believed that the characteristics of aesthetic experience can make the subject feel the feeling of full pleasure through the senses. Therefore, when the subject is experiencing aesthetics, the positive emotions such as inner pleasure, harmony, calmness, and self-satisfaction are accompanying feelings.

But aesthetic experience brings not just a single pleasant feeling, but even a different level of feeling. Yang (2009) pointed out that beauty is not all pleasant. For the aesthetic experience in art, in addition to pleasure, there may be emotions such as horror, sadness, anxiety or tension. It can be seen that pleasure is not the only feeling of defining the aesthetic experience, but it is certain that the aesthetic experience triggered by the subject after experiencing the object plays a role in the subject's feelings.

As noted above, the aesthetic experience is a psychological process that combines the feelings of pleasure, cognition and understanding produced by the aesthetic object. Aesthetic experience is the process of interaction between cognition and emotion (Leder, Belke, Oeberst, & Augustin, 2004). In addition, aesthetic experience can inspire an individual's inner strength and creativity (Lin, 2009; Chen, 2009; Dewey, 1981; Fenner, 2003; Lussier, 2010).

2.4.2 Theories of aesthetic experience

In the discussion of aesthetic experience, researchers have proposed different theoretical perspectives to explore the aesthetic experience, and the researchers have

also worked out the characteristics and connotations of the aesthetic experience to illustrate the aesthetic experience. The theoretical views of scholars on aesthetic experience are as follows:

2.4.2.1 Theory of cognition

J. Maquet (Wu & Wang, 2003) explains aesthetic experience from the perspective of cognitive theory, and believes that the perception of aesthetics is to confirm the scene framed by the individual's agglutination. As one sees all of this frame with aesthetic view, attention flows through all the content and details of the object, placing interest in the object itself behind the scene, and the viewer places himself or herself in a status of serenity and detachment. Once the scene is in the heart, concentration induces a state of meditation, which gives the individual a sense of unity and becomes a perceived object. This cognition of separation and inconsistency becomes an interest of concentration, which causes contemplation to take effect. By contemplating, all the consciousness of objects, time, space, and physical body disappears, and the absorption of beauty is achieved. The viewer's self enters a field of aesthetic experience (Maquet, 2003), therefore, meditation is an important medium for aesthetic experience. Huang (2013) believes that aesthetic experience is based on perception, and perception is the driving force of aesthetic experience. However, perception is not the only constituent of aesthetic experience. representative thinking, imagination, and understanding of inner meaning are the common sources of aesthetic experience.

Cui (2000) believes that aesthetics is a free activity in which imagination and understanding are coordinated, and it is associated with the feelings of fast and unpleasant subjects. Judgment of aesthetics depends on four elements: pleasure,

understanding, imagination and common sense. Zhu (1993), based on the beauty of Greek goddesses and on the pleasure caused by sexy girls, argues that general beauty and pleasure are different. Pleasure is based on the satisfaction of personal requirements of the individual. For example, if one is hungry or thirsty, he or she will want to eat or drink. However, aesthetic experience is beyond the satisfaction of the senses, it begins with a fascinating aesthetic attitude that does not contain any physiological needs; that is, it is what Kant argues in terms of a satisfaction free from any conflict of interest. In other words, aesthetics is a pleasure that is beyond practical interests.

From Kant's point of view on criticism of aesthetic judgment, aesthetics is the pleasure of surpassing the practical interests, the result of introspective judgment. The aesthetic mind is free and creative. The aesthetic judgment includes subjective feelings, and must also consider the common feelings of social culture. Since there is a cognitive value shared by people, when the individual with aesthetic experience expects us to have a sense of pleasure, we will also feel a sense of pleasure, so aesthetics is inevitable (as a subjective one) and universal; this kind of mutual sensibility makes people feel happy even by watching the superficiality of things, and they can communicate to and share the happiness with others.

J. Maquet also believes that an individual with aesthetic experience is a psychologically prepared viewer who meets with an attractive aesthetic object. When experiencing the psychological feeling of the object, he or she hold an indifferent and de-analytical attitude, with an interpretation of what happens in front of him or her that lacks knowledge and emotion (Maquet, 2006). In general, aesthetic experience is characterized by uncaring, non-conceptual, formal, or whole-hearted participation,

inevitability, and universality (though lawless) (Lin, 1998; Cui, 2000; Liu, 2001). Later, researcher A. Schopenhauer adopted I. Kant's view of no concern and no formality and claimed that the aesthetic experience is only a kind of care or contemplation, an observation of nothing for something.

Lin (2009), from the point of view of I. Kant and A. Schopenhauer's aesthetic experience, argues that aesthetic experience occurs when the subject adopts an attitude that does not affect the practicality or has no conflict of interest and is fully committed. In addition, the form or image of the intuitive object, assisted by imagination, makes the subject enter a state of inseparability between the mental host and the mental guest so as to gain a sense of sensory pleasure. However, Lin (2009) believes that the four attributes of happiness, concentration, inner interest, and challenge are not sufficient to distinguish aesthetic experience from other experiences. For example, climbing or playing tennis may be a pleasant, highly concentrated, and challenging but spontaneous experience; however, most people will not classify them as an aesthetic experience. When dancers dance or painters paint, we think they have aesthetic experience, the difference between which is that the average observer limits the aesthetic experience to the scope of artistic activity, which is too narrow. In fact, aesthetics is realized when people have reached a certain level of experience or realm in their activities. For example, a highly skilled climber can discover the beauty of the mountain; an experienced athlete can experience the beauty or pleasure of a tennis competition. It can be seen from the above that the aesthetic experience is not immutable, nor is it the original feeling that cannot be changed. Of course, aesthetic experience is not just limited to the art alone.

2.4.2.2 Flow theory

According to the flow theory proposed by Csikszentmihalyi (1990, 1999), when an individual expresses a strong interest in an activity or thing, regardless of the total cost of the experience, and feels a deep and enjoyable experience, innovative behavior is generated. J. Maquet pointed out that the moment when the meditating viewer and the aesthetic object meet is the peak of the aesthetic process, and this moment is also the aesthetic experience. This is a kind of feedback experience, because meditation is an integrated consciousness model. On the basis of self-centered action which is used to analyze and differentiate aesthetic experiences, emotion leads everything (Maquet, 2006).

When an aesthetic experience combines the viewer and the object, no one is the owner of the other. For example, the joy of watching the moon will not be reduced by sharing with others, but the moon-watching will be more enjoyable. In addition, since the aesthetic experience involves the power to feel and the power to imagine, people will feel free. As a result, they can cultivate temperament, inspire inner energy, break the way of thinking in a single direction, maintain innovation and flexibility, and enhance their own ability to understand the nature and humanity.

Lin (2009) also believes that the acquisition of aesthetic experience is the individual's initiative to dedicate themselves to the aesthetic object, to integrate various stimuli and messages, so as to produce a feeling of pleasure, and so on. Through the process of contemplation, the viewer will absorb and internalize the aesthetic object they have observed and then turn it into personal experience, while the personal aesthetic experience will become the individual's perception of beauty. These experiences, through the combination of subconscious and conscious processes, become the potential energy to activate creativity. For example, in an art class, after

teachers have talked about the work of art or after they have watched the work of art, the students will be able to create different works of art by combining their own ideas.

2.4.3 Relevant studies of aesthetic experience

J. Dewey's "Experience and Nature" (1925), "Art as Experience" (1934), and "Experience and Education" (1938) emphasize that experience is the key to education. The book "Art is Experience" has a particularly significant influence on the modern art education theory. The book puts forward the view that the aesthetic experience originates from the experience of daily life. The source of the subject's aesthetic experience, as Yang (2009) pointed out, can be roughly divided into three levels: daily life experience, art experience and natural experience. In the article "The Pervasiveness of the Aesthetic in Ordinary Experience," Irvin (2008) argues that although many everyday experiences are simple and ordinary, they are full of aesthetics. In everyday life experiences aesthetic attention can provide greater satisfaction in life and contributes to our ability to pursue value. The things in life can be the source of aesthetic experience, but the spirit of individual concentration, keen observation and imagination are needed. The key point is whether there can be strong, lasting, unified, complete and satisfying experience (Yang, 2009). Chen (2013), based on the social cognitive theory (Metacognition Theory) that daily life experience is just aesthetic experience and by integrating relevant theories and empirical findings, found that aesthetic experience consists of interactions of sensuality, emotionality, and cognitiveness, and has the characteristics of interactivity, dynamicity, and multiplicity. She also points out that omnipresent aesthetic experience comes from the transformative experience produced by people who observe, explore, imagine, and reflect on the people, things, and objects that they touch in their daily lives (Davies et

al., 2009). In her opinion, it is not appropriate to neglect the field of daily life in the discipline of aesthetics because the nature of the great satisfaction provided by the field of daily life is different from the experience gained from art and nature.

Yang (2009) believes that art is a way of expressing experience and a superior concept of aesthetic experience, which is the impression after people experience things. Therefore, the deep aesthetic experience is to discover the elements and power of social criticism in the works, not just the enjoyment of the surface. Lin (2009) believes that aesthetic experience refers to the basic views held by people in the aesthetic activities, and it also refers to personal experiences generated due to factors like aesthetic standards, tastes, ideals, even personal outlooks on life, society, cultural economy, politics, and the background of the times. In the natural aesthetic experience, nature is different from life and art, and it can provide a multi-sensory aesthetic experience. All senses are immersed in the environment, not only gaining the inner satisfaction of the body and mind, but also bringing about the reverence and admiration for life and the Creator (Yang, 2009). It can be seen that as long as the viewers experience different sources of experience, the aesthetic experience they generate also has differences in depths and levels.

Eisner (2002) believes that schools are the most appropriate place to teach art, but if art education is used as a tool for other purposes, it will undoubtedly weaken the artistic experience, because in the context of education, it is full of short-lived (brief), bound (Bounded), hard to evoke, by no means continuous, or predictable moment, so it is difficult to have an aesthetic experience (Kerdeman, 2005).

Aesthetic experience is also used in the study of educators. Chen (2009)

points out that education requires educators to adopt aesthetic attitudes to amend the deviation of educational rationality, and discusses the rational contradictions in the current system of education and institutionalization such as school rules, rewards and punishments, teachers and students, textbooks and assessment standards, the pursuit of standard answers and scores, restrictions on teachers and students to pursue self-development and self-realization, exclusion of creative aesthetics of teachers and students, and restrictions on the freedom and creativity of teachers and students. Therefore, only by breaking the frame of institutionalization of educational activities and exploring aesthetic attitudes can education activities be more creative and complete.

Researchers also apply aesthetic experience to curriculum construction. Lin (2009) explores construction of curriculum aesthetics with aesthetic experience, and proposes that students should be the subject of exploration, and teachers should reflect and transcend themselves and be familiar with various media, including flexibility. Projects and aesthetics are constructed with flexible curriculum objectives, content of imaginative textbooks, attractive learning activities, contextualized learning situations and a free living environment, and emphasis on qualitative assessment courses. Moreover, the researchers also believe that in education, students should gain aesthetic experience and develop their creativity, competitiveness and citizenship through appropriate curriculum learning and teaching activities (Zhou, 2010; Chen, 1998, 2009; Feng, 2006; Lussier, 2010). Therefore, the understanding, imagination, and curriculum of aesthetic experience are also factors that influence the creativity of students.

In recent years, researchers have found that aesthetic experience is helpful

for students' creativity, imagination, and open thinking, and contributes to students' learning outcomes (Lin, 2009; Lin, 2001; Zhou, 2010; Chen, 1998; Chen, 2013; Feng, 2006; Eisner, 2002; Lussier, 2010), so aesthetic experience has a positive effect on school education and student learning. However, this study integrated the above researchers' research on aesthetic experience and found that researchers have an important influence on creativity (Maquet, 2003; Lin, 2009; Richards, 2009; Dewey, 1981; Lussier, 2010; Richards, 1998). On the other hand, however, there are few empirical studies on the causal relationship between aesthetic experience and innovative behavior. The main purpose of this study is to explore innovative behavior with aesthetic experience, and analyze the effects of aesthetic experiences on innovative behavior.

2.4.4 Measurement tools for aesthetic experience

Chen (2009) believes that aesthetic education is to enable the educated to complete the “appreciation of beauty” and “the sensibility of beauty”, and then to generate “creativity for beauty” and participate in the pursuit of the experience of beauty. That is, it is to guide the viewers to enjoy the value of aesthetic activities from the interaction or appreciation activities with art. Therefore, without a full feeling, experience cannot be aesthetic. Teachers and students should integrate everything in the learning process, and make a meaningful connection between learning experiences, rather than a series of fragmented experiences (Parrish, 2009), which will bring about the realization of new meanings and the creation of new wholes, and aesthetic experience will be generated. Therefore, from the connotation of the aesthetic experience put forward by the above researchers we can find that the aesthetic experience includes the connotations of initiative, unity, sensibility, pleasure,

complexity and perfection, and can inspire the inner energy and creativity of the individual (Lin, 2009; Chen, 2009; Dewey, 1981; Fenner, 2003; Lussier, 2010).

Regarding the related research on the measurement of aesthetic experience, Chen (2002) explores the “Aesthetic Experience Scale” for students' appreciation of art and explores the feelings of students appreciating art. The scale has four questions. Feng (2006) used the senses of aesthetics and school aesthetic education curriculum to compile the “Student Aesthetics and Experience Scale” to explore the aesthetics and experience of students after the aesthetic education of the College of Hospitality. The scale measures dimensions such as “Aesthetic Understanding and Pleasure”, “Aesthetic Imagination” and “Aesthetic Course Effects”. It measures the results of students' senses of aesthetics and their aesthetic experience after aesthetic education is conducted in schools; Xu (2013) used the “Aesthetic Experience Survey” to explore the aesthetic experience of art university students on product design. Ye (2013) developed the “Design Life Aesthetics Experience Table” to explore the subjective perception and feelings of college students in the daily life of the products they touched. The dimensions of the scale are “perception and analysis,” “appreciation and emotion,” and “life experience association,” which are used to measure the perception and feeling of college students' experience of their daily products. However, the aesthetic experience-related research is mainly in curriculum aesthetics and theoretical construction (Zhou, 2010; Lin, 2009; Chen & Zhang, 2007), and teaching implications (Chen, 1998; Chen, 2013).

Chang (2017) developed the "Aesthetic Experience Scale" to explore the correlation between the aesthetic experiences of college students in the discipline of design and teachers' creativity teaching. This scale was based on many scales

developed by relevant researchers, such as Ye (2013)'s "Design Product Aesthetic Life Experience Scale", Feng (2006)'s "Aesthetic Conservation and Experience Scale." In addition, this scales also based its design on the initiative, unity, sensibility, pleasure, complexity and completeness of aesthetic experience as the concept and infrastructure of the scale (Lin, 2009; Chen, 2009; Dewey, 1981; Fenner, 2003; Lussier, 2010). Finally, this scale integrated many researcher's views on aesthetic experience, including J. Maquet, I. Kant, A. Schopenhauer, Seel (2008), Tomlin (2008), Maquet (2003), Huang (2010) and other researchers.

This study uses the "Aesthetic Experience Scale" compiled by Chang (2017), which has a Chinese cultural background and is suitable for the measurement of aesthetic experience by teachers and students in Chinese colleges and universities. The scale is divided into four dimensions: the pleasure of aesthetics, the attitude of aesthetics, the understanding of aesthetics and the complete experience of aesthetics.

2.5 Social Cognitive Theory

American psychologist Bandura (1986) explains the Social Cognitive Theory (SCT), which focuses on the dominance of human cognitive activities and processes in their behavior. According to the social cognition theory, individual behavior depends on individual factors and external environmental factors. Individual factors (such as cognitive factors, emotional factors, etc.), behavioral factors, and external environmental factors produce dynamic interactions among themselves. First, the environment acts on the individual behavior, and the individual behavior acts on the environment. Second, the individual's internal factors, such as ability, motivation, emotion, and goal orientation, are the fundamental factors that determine the

individual's behavior. It determines the individual's behavioral pattern and behavioral intensity. At the same time, the results of individual behavior will adjust and correct the internal factors of these individuals; again, in the relationship between individual factors and environmental factors, individual cognitive ability will be affected and restricted by the environment; and in turn, the environment is also affected by individual cognitive ability, and the environment can only really play its role when it is recognized and grasped by the individual.

In social cognitive theory, "society" recognizes the environmental origin of most human thoughts and behaviors, while "cognition" emphasizes the influence of cognitive processing on human behavior. In the interaction between environmental factors and cognitive factors, Bandura (1986) emphasizes the leading role of human cognitive factors in behavioral change, and believes that there is a causal relationship between cognitive activities and behaviors. Self-efficacy refers to a subjective judgment of an individual on whether he or she can successfully complete a particular task. This judgment is based on many internal and external factors, namely, the results of the interactions between external environment and past experience, achievement motivation, etc. Self-efficacy is one of the four basic characteristics of core self-evaluation. Bandura (1997) believes that individuals with strong self-efficacy are more likely to produce innovation behaviors, indirectly indicating that the higher the core self-evaluation is, the greater the probability of individual behavior is.

2.6 Savoring, Creative Self-Efficacy, and the Relationship Between Aesthetic Experience and Innovative Behavior

2.6.1 Differences of variables with different backgrounds

In the control variables section, this study will use the gender, teaching age and other variables of university teachers as control variables. This is because, according to the ecosystem model proposed by Ye (2000), creativity is the result of interaction between individual knowledge, intention, skill and environment. Its environment, including family, school and organization, will affect the development of creativity, and the background and experience of university teachers may have an impact on creativity (Ye, 2000; Amabile, 1996; Csikszentmihalyi, 1999; Csikszentmihalyi & Wolfe, 2000; Hennessey, 2003; Turner, 2013).

College students with different genders and majors have different savoring (Guo, 2014), and the savoring influence innovative behavior through creative self-efficacy. Individuals will perceive changes in environment and situation, interpret their own experiences, and reflect on their own behavior in a special way (Chang, Wang, & Lee, 2015). Therefore, the savoring of university teachers of different genders and teaching ages are different, and the savoring of university teachers of different genders have different influences on innovative behaviors. Therefore, this study assumes that there are significant differences in university teachers' savoring, creative self-efficacy, aesthetic experience, and innovative behavior in different backgrounds. Therefore, this study makes the following hypotheses:

Hypothesis 1: There are significant differences in the savoring, creative self-efficacy, aesthetic experience, and innovative behavior of university teachers with different backgrounds;

Hypothesis 1-1: There are significant differences in the savoring, creative self-efficacy, aesthetic experience, and innovative behavior of university teachers with different genders;

Hypothesis 1-2: There are significant differences in the savoring, creative self-efficacy, aesthetic experience, and innovative behavior of university teachers with different teaching ages;

2.6.2 Relationship between savoring and innovative behavior

Savoring includes an initiative to feel the positive experience. Creativity arises from the positive orientations of positive emotions. Amabile, Barsade, Mueller and Staw proposed in 2005 that positive emotions are the cause of creative thinking and have a nurturing effect on creative thinking, which means that savoring is one of the pre-factors of creativity.

Savoring is the ability to actively feel the experience of positive emotion, while positive emotion is closely related to innovative behavior (Bryant & Veroff, 2007). Savoring is an indicator of regulating positive emotions (Nelson & Simmons, 2003; Simmons, 2002). It is also the individual's ability to immerse pleasure in positive experiences, and pleasure is a positive emotion which includes satisfaction, joy, happiness, confidence, hope or optimism. Fredrickson's (2005) expansion and construction theory points out that when individuals are in a state of pleasure and happiness, they have better cognitive flexibility and behavioral tendencies, which are indeed capable of promoting the positive behavior of innovation. King, Hicks, Krull and Del Gaiso (2006) believe that positive emotions expand individual imagination and creativity, brings up current concerns or worries to a broader context, and help to come up with more different ideas. Studies have shown that positive emotional state has a significant relationship with creativity (James, Brodersen, & Eisenberg, 2004). The influence of savoring on creativity can be seen from the perspective of savoring behavior and intrinsic motivation. When the individual savors something, he or she

focuses on continuous sensory perception and cognitive experience, and feels a vital force to advance one's positive emotions (Bryant & Veroff, 2007). This intrinsic motivation helps individuals to feel the art at work or propose new solutions when faced with problems (Amabile, 1996). Therefore, savoring behavior will lead to creativity, although some behaviors are performed only for the purpose of accomplish missions, those behaviors, inspired by internal motivation, are more creative when executing missions.

Innovation and creativity have been considered interchangeable in past studies (West & Farr, 1989) because their connotations are similar, being influenced in the same way by individual differences, organizational environment and other factors. Factors that influence an individual's innovative behavior, from the perspective of personality traits (Hurt & Cook, 1977), or from a behavioral perspective (Jansse, 2000), point to the ability and performance of cognition.

Savoring proposed by Bryant and Veroff (2007) is the ability to actively feel the positive emotional experience, while the positive emotion is closely related to the innovative behavior. Bryant and Veroff advocates that savoring contributes to the improvement of creativity, and creativity contributes to the improvement of individual creative performance. Individuals can fully appreciate positive experiences and emotions, and promote their creative thinking and creative ideas.

Bryan and Veroff (2007)'s "Way of Savoring Checklist (WOSC)" measures variables such as sharing with people, immersion focus, behavioral expression, contrast, perceptual sensitivity, memory construction, self-motivation, current consciousness, detail happiness, avoidance of killing pleasure, and so on. Those variables are found to be consistent with the intentional activities pursued by Boehm

and Lyubomirsky (2009). These intentional activities can help individuals to become happy makers and enhance their positive emotions. Sonnentag (2003) mentions that employees' innovative behavior needs to rely on their focus on work, but the members of the savoring organization will have an immersive focus on the process of savoring, thus making individuals willing to continue and constantly try various solutions so as to further increase the chances of solving the problem (Bryant & Veroff, 2007). According to Amabile (1996)'s componential theory of creativity, contextual factors are important factors influencing the creative performance of organizational members. Amabile, et al. (2005) point out that the environment that is constructive and mutually encouraging to individuals can inspire stronger positive emotions and help them develop creative thinking. In addition, Bryant and Veroff (2007) proposed social support to enhance savoring, emphasizing the importance of individuals sharing their feelings with others in social networks because sharing feelings with others can increase the impact of positive emotions (Bryant & Veroff; Gable, Reis, Impett, & Asher, 2004). It can be seen that the fact that individuals fully appreciate positive experiences and emotions can promote their creative thinking and creative ideas. In recent years, many scholars have emphasized the important influence of interaction between individuals and the environment on creativity (Hong, Huang, & Lin, 2008; Amabile, 1996; Hirst, Van Knippenberg, & Zhou, 2009).

In the process of savoring, people will enhance the sensitivity of the senses, increase their sensitivity to the surrounding environment, and focus on the things they value (Bryant & Veroff, 2007). In addition, individuals can connect with different stimuli, use cognitive elements in a broad way and address more stimulating questions (Isen, 1999). In empirical research, Amabile, Barsade, Mueller and Staw (2005)

pointed out that the discussion of innovative behavior must consider the individual's positive emotions, mainly because positive emotions can effectively improve the effectiveness of solutions to problems that require flexibility. Chen (2011), Chiu (2009), Lee and Jeng (2014) found that savoring can improve innovation behavior. Therefore, based on theoretical discussions and related research findings, this study suggests that university teachers' savoring has a positive impact on innovation behavior.

Hypothesis 2: University teachers' savoring have a positive impact on their innovation behavior.

2.6.3 Relationship between savoring and creative self-efficacy

Creative self-efficacy and self-strength are similar concepts. In the situation of an individual facing challenges, creative self-efficacy provides motivation and a strong belief that will increase the level of persistence and stimulate individual creative performance (Bandura, 1997). Self-efficacy is an important mechanism for self-regulation in social cognitive theory, because self-confidence allows individuals to fully utilize and use the resources they need to complete tasks and gain positive experience (Bandura, 1997). Savoring has been proven to maintain and enhance a person's positive emotional experience (Bryant, 1989, 2003; Seligman, Rashid, & Parks, 2006). Individuals can fully appreciate positive experiences and emotions, and promote their creative thinking and creative ideas (Bryant & Veroff, 2007). Emotion is a psychological process related to creative thinking and one of the elements of the process that promotes innovative behavior (Amabile, et al., 2005).

At present, most studies focus on how to develop group creativity and organizational creativity (Amabile & Khaire, 2008; Arendt, 2009; Gaggioli, Mazzoni,

Milani, & Riva, 2015), and research on savoring is mostly limited to the application of counseling (Hargrove, Nelson, & Cooper, 2013). Therefore, there is relatively little research on the application of savoring in individual creativity. Lin (2013) takes college students as the research object and studies the relationship between personality traits, savoring and creative self-efficacy. The research results show that there is a significant positive correlation between personality traits and creative self-efficacy. According to this, any psychological change of the individual is caused by the purpose of changing his or her own expectations of self-efficacy. As a result, savoring can be included in the antecedent variable.

The cause of individual creativity is the complex results of individual cognition, motivation, attitude, emotion and other psychological processes. Individual creative self-efficacy plays an important intermediary role in this regulating process (Bandura, 1982, 1986). In empirical research, Tierney and Farmer (2002, 2004) found that creative self-efficacy significantly predicts creative performance. Wang, Zhang and Martocchio (2011) found a causal relationship between role ambiguity and creativity, and fuzzy roles are conducive to work creativity, while creative self-efficacy has a complete intermediary effect. Li and Wu (2011) found that college students' creative self-efficacy can exert a partially intermediary effect on the relationship between optimism and innovative behavior. Xu, Liang and Xu (2014) pointed out that college students' psychology and environment can be integrated into a learning model that predicts scientific imagination through the mediating role of self-efficacy. Hong et al. (2008) pointed out that if individuals perceive the positive feedback of important others, their creative self-efficacy have a strong predictive power on their own creative life experience. Lin and Qiu (2010) found that creative

personality traits affects creative teaching behavior through creative self-efficacy.

Liang and Chang (2014) found that creative self-efficacy directly affects their imagination, and intrinsic motivation indirectly affects students' imagination through creative self-efficacy. Jaussi and Randel (2014) explored antecedents and processes in which two types of creativity influenced the organization: the incremental creativity and radical creativity. The results show that creative self-efficacy is only positively related to radical creativity. The main purpose of Chen (1998) study was to explore the differences between teachers' backgrounds and other factors such as personality traits, self-efficacy, student behavior beliefs, and class management style orientations. The results show that there is a significant positive correlation between teacher personality traits and self-efficacy. Chang et al. (2015) found that savoring affects individual creative performance through creative self-efficacy. Therefore, this study speculates that university teachers' savoring will influence individual innovative behavior through creative self-efficacy. This study proposes the following hypothesis:

Hypothesis 3: University teachers' savoring plays a positive role in creative self-efficacy

2.6.4 Relationship between savoring and aesthetic experience

Savoring is an indicator of positive emotions (Nelson & Simmons, 2003; Simmons, 2002). It is also the individual's ability to immerse pleasure in positive experiences, while pleasure is a positive emotion that includes satisfaction, joy, happiness, confidence, hope or optimism. Adopting some specific savoring strategies will enhance people's aesthetic experience. For example, using memory construction can prolong positive experiences (Bryant, Yamold, & Morgan, 1991), and sharing

with others helps to construct individual psychological resources. Related research shows that when individuals listen to positive categories of music and focus on their attention, people will have more aesthetic experience (Ferguson & Sheldon, 2013).

Organization members with good savoring produce immersive concentration in the process of savoring and by immersing themselves in positive events, they are willing to continue and constantly try various solutions, accumulate experiences, and thus improve chances of solving problems (Bryant & Veroff, 2007). Aesthetic experience can be found through aesthetic behavior. Han (2004) believes that when aesthetics is placed in life, an aesthetic attitude, or a savoring, is formed, which can naturally be observed from the behaviors of daily life.

“Aesthetics” is a high-level spiritual experience of the features of an object, which is produced by the contact of sensory, auditory, tactile and other organs with the object (Qiu, 2013). Zhang (2007) defines “experience” from the perspective of psychology as the accumulation of all habits, knowledge, skills, ideas and concepts of the individual in life. Experience is the cause of learning. There first exists the situation that leads to experience, where the individual participates in activities. Then learning is produced. The aesthetic experience is a psychological process that combines emotion, cognition and understanding produced by the aesthetic object, and is also the interactive process between cognition and emotion (Leder, Belke, Oeberst, & Augustin, 2004). With regard to savoring and aesthetic experience, many scholars have proposed the importance of aesthetic education and its implementation for these two abilities. The purpose of aesthetic education is to enhance the emotion of aesthetic activities. Chen (2009) pointed out that the purpose of “aesthetic education” is to enable the educated to experience the “appreciation of beauty” and the “feeling

of beauty.” Then the educated can generate “creativity to beauty” and participate in the pursuit of beauty, which is an educational activity. Through these aesthetic education activities, cultivate people’s perceptual appreciation of beauty can be cultivate, their savoring and critical abilities can be improved, and aesthetic experience can be gained. Huang (2013) proposed that aesthetic education should focus on cultivating modern people with aesthetic savoring, emphasizing life cultivation and environmental beautification, and promoting the application of aesthetic economy in aesthetic education based on aesthetics. In addition, aesthetic education can enhance the aesthetic experience. Qiu (2013) believes that aesthetic experience should focus on developing self-awareness, sense of beauty and savoring, further exploring the meaning and goals of life and achieving spiritual values. Smith (2005) believes that the purpose of aesthetic education is in nature since human environment and daily activities are closely related to it, though aesthetic experience does not necessarily mean the whole of art lifestyle.

Han (2004) proposed that aesthetic experience can enhance perceptual savoring, cultivate intellectuality, improve behavioral practice, and enhance the realm of cultural development. In addition, Chen (2009) mentioned in the article “On the Theory and Practice of Aesthetic Education” that students must learn the perceptual ability of aesthetic experience in art. In order to achieve this goal, students must learn the requirements of aesthetic perception; in learning the tone of music, students must have accurate goals, but there is no obvious control in visual art. Aesthetic perception can be learned through four levels: the learning of object-feeling attributes (color, shape, line), formal attributes (balance, rhyme), technological attributes, performance attributes (affects) (Hewitt & Rush, 1987).

Related studies on aesthetic experience have shown that when individuals pay attention to the concentration of good things, people will experience more aesthetic experience (Ferguson & Sheldon, 2013). Organizational members with strong savoring produce immersive concentration in the process of savoring, accumulate experience, and thus increase the chances of problem solving (Bryant & Veroff, 2007). “Aesthetic experience” is born from the heart through the contact of the senses such as sight, hearing and touch, and produces a high-level spiritual experience (Qiu, 2013). Zhang (2006) defines “experience” from the perspective of psychology as the accumulation of all habits, knowledge, skills, ideas and concepts of the individual in life. Huang (2013) believes that, on the one hand, the aesthetic experience is a self-sufficient and contemplative perceptive action, with perception completely immersed in the object of something; on the other hand, it is a crisis-like perception that erupts in daily life practice. It allows the main body of action to face facts directly, without dodging them. Therefore, this study assumes that university teachers’ savoring will influence individual innovative behavior through aesthetic experience. Therefore, the research hypothesis is as follows:

Hypothesis 4: University teachers’ savoring has a positive effect on aesthetic experience.

2.6.5 Relationship between creative self-efficacy and innovative behavior

The cause of innovative behavior is the complex result of individual cognition, motivation, attitude, emotion and other psychological processes. Individuals’ creative self-efficacy plays an important intermediary role in this regulative process (Bandura, 1986). Bandura (1997) pointed out that a high degree of self-efficacy is a necessary condition for the discovery of new knowledge or creative

works, and that self-efficacy is an important motivational force that influences individuals to engage in specific behaviors. According to the creative action theory proposed by Ford (1996), ability beliefs and emotions are important motivational factors. Positive emotions will arouse certain cognitive changes and lead to creativity. Tierney and Farmer (2002) found that creative self-efficacy can directly promote employee creative behavior, which is more explanatory than job self-efficacy in employee creative behavior, and the belief in creative behavior and the belief in self-creative ability will affect the individual's creativity.

Empirical studies have found that Starko (2005) develops a self-efficacy scale based on creative cognition and emotions, and proposes that there is a significant positive correlation between individual creativity and self-efficacy. Cai (1992) used college students as a target to verify that general self-efficacy was positively correlated with individual creativity. Based on computer technology, Zhang (2002) compiled the self-efficacy scale by referring to Bandura's (1997) extension theory on "self-efficacy." She found that the higher the self-efficacy of knowledge recipients is, the more effective the knowledge innovation is. In addition, in terms of people who receive different degrees of knowledge, there is a significant difference between self-efficacy and their knowledge innovation. The results of some studies show that self-efficacy is related to individual creativity, and past studies indicate that individual self-efficacy may develop in creative performance and inspire its intrinsic motivation (Amabile, 1996).

Hong (2004) also suggest that individual creative self-efficacy is an important variable affecting the intrinsic motivation and behavior of the individual. Research results show that creative self-efficacy and intrinsic motivation are

important concepts in explaining innovative behavior, while at the same time, self-efficacy has an important influence on the intrinsic motivation of the individual. In other words, creative self-efficacy will enhance the intrinsic motivation of the individual and thus influence the generation of innovative behavior. The higher the individuals' creative self-efficacy is, the more they can motivate their intrinsic motivation and make them engage in their work with great pleasure, thus promoting creative performance of individuals. Many studies have found that students' creative self-efficacy has a positive predictive effect on creativity, creative performance or creative products (Lin & Lin, 2004; Chen & Guo, 2013; Tierney & Farmer, 2002). Gao, Wu and Chen (2016) established a theoretical model for employee self-efficacy and innovative behavior. Data analysis shows that employee innovative self-efficacy has a significant positive impact on their innovative behavior. Liu (2017) found that fashion stylist's creative self-efficacy has a significant positive impact on innovative behavior.

As noted above, it can be seen that creative self-efficacy affects individual's innovative behavior and has more influence and predictive power for the generation of innovative behavior in creative activities. Therefore, this study speculates that the creative self-efficacy of university teachers has a positive impact on innovative behavior. Therefore, the research hypothesis is as follows:

Hypothesis 5: University teachers' creative self-efficacy has a positive impact on innovative behavior.

2.6.6 Relationship between aesthetic experience and innovative behavior

Dewey's aesthetic view advocates "an aesthetic in the raw", which is a process that focuses on the experience of life, with rich and direct attributes, and is

intertwined with everyday life. He also believes that the connection generated when viewing art is the creative potential combined with conscious and subconscious minds (Richards, 2009), because the appreciation of art is an intrinsic activity that integrates the observed into a self-role and transforms into the art. This is the generation and realization of aesthetic experience. Moreover, this transformation will occur in the creation and viewing of works of art. These two activities will stimulate daily innovations through people's doubts, surprises, etc., and will continue to undergo transformation (Richards, 2009). Therefore, these life experiences combined with daily innovations make the enjoyment of art a creative and meaningful experience.

Richards (2009) pointed out in "New Ideas on Daily Creativity and Human Traits" that everyday creativity is actually related to aesthetics. It is not only about writing poetry or chorus, but also about helping children to create and express in school (Richards, 2009). From the point of view of aesthetic experience theory and creativity cognitive theory, when the viewers meet with the aesthetic objects, the viewers absorb and internalize the beauty through the process of contemplation, and transform it into individual thinking and feedback experience, which becomes an aesthetic experience and also an individual perception of aesthetics (Maquet, 2003; Lussier, 2010). These experiences, through subconscious and conscious combination, will become potential energy for initiating innovative behavior and may play a role in the next innovative behavior (Lin, 2009).

Individuals like to appreciate the object of beauty, and can easily and unconsciously be attracted by it. In addition, the individual will feel happy and have a deep impression on what they appreciate, and then help to generate future innovative behavior; that is, the pleasure of the individual to the beauty helps to develop

creativity. In addition, accepting diverse cultures and different ideas and finding the good side and value from bad things can help develop individual vision and thinking, and stimulate individual innovative behavior (Banks, 2007; Runco, 2008). For the perception and understanding of beautiful things, Chen (1998) believes that the school's aesthetic education is an educational activity that can be bathed in the feelings of beauty from time to time. It also allows the educated to complete the "appreciation of beauty", the "sensitivity of beauty," and then generate "creativity to beauty." In addition, sharing and discussing good experiences with others, as well as recalling the experience of things that have been in contact with beauty in the past, will deepen the impression of individuals on beauty, and relevant images will appear in the minds when one tries to create something, thus promoting the emergence of innovative behavior. Moreover, scholars also believe that the acquisition of students' aesthetic experience is positive for the development of innovative behavior (Maquet, 2003; Chen, 2013; Dewey, 1981; Lussier, 2010).

Aesthetic experience can trigger individual intrinsic motivation and self-belief, thereby strengthening the individual's daily imagination and promoting the creation of innovative behavior (Davies, 2009). Through the process of aesthetic pleasure in aesthetic experience, aesthetic attitude, understanding of the complete experience of beauty, the individual combines the subconscious and the conscious, and becomes the potential energy to initiate innovative behavior, and may play a role in the next innovation behavior (Lin, 2009). According to the immersion theory proposed by Csikszentmihalyi (1999), individuals have a strong interest in a kind of activity or thing, and when they feel a pleasant experience, they are more likely to produce innovative behavior. The pleasure of the individual to the beauty contributes

to the development of creativity, which can help to expand individual vision and thinking, and stimulate individual innovative behavior (Banks, 2007; Runco, 2008). Therefore, this study speculates that the aesthetic experience of university teachers has a positive impact on innovative behavior. Therefore, the research hypothesis is as follows:

Hypothesis 6: The aesthetic experience of university teachers has a positive impact on innovative behavior.

2.6.7 Relationship between aesthetic experience and creative self-efficacy

Maquet (2003) claims that when an individual is interested in things, he or she may be easily absorbed in meditation, through which he or she enters the stage of absorption and internalizations of aesthetic experience. This process endows individual a uniqueness of aesthetic experience. Individuals, through the past experience to visual art, and other experience and memory, along with meditating techniques exercised by their personal development, become the core of connecting aesthetic experience, realizing, uniting and representing infinite potential, and also enabling themselves to gain confidence in their potential consciousness. Therefore, aesthetic experience ultimately exists in the individual's understanding (Wu & Wang, 2003). That is to say, when an individual is enjoying arts, he or she will be gaining new aesthetic experience through meditation in order to obtain the partial artistic potential. Combined with previous experience, it will give the individual confidence in art as they would subconsciously believe that they have improved because they are inspired by the potential of arts. Furthermore, aesthetic experience may also occur in other areas. For example, when watching sports competitions, individual's confidence may be enhanced or inspired by the performance of the players whom they admire

because they can easily share experience with the player as if they themselves can make it subconsciously. Girod and Wojcikiewicz (2010) find that aesthetic experience is not only manifested in learning outcomes, but it is also displayed in learners' self-efficacy beliefs of further exploration.

Both Bandura (1997) and Kear (2000) believe that abundant experience and self-confidence are the main prerequisites for self-efficacy. They emphasize that experience will occur before self-efficacy. As a result, the more experience individuals have accumulated, the higher their self-efficacy will be. This statement illustrates that the accumulation of aesthetic experience has a positive impact on self-efficacy. Actually, many researchers have supported this claim (Biswas et al., 2010; Kinnebrew & Biswas, 2011). Therefore, this study speculates that the aesthetic experience of university teachers has a positive impact on creative self-efficacy. Based on this, this research can make the following hypotheses:

Hypothesis 7: University Teachers' Aesthetic Experience Has a Positive Impact on Creative Self-efficacy.

2.6.8 The relationships between savoring, creative self-efficacy, aesthetic experience and innovative behavior

Creative self-efficacy and self-strength are similar concepts. When individuals encounter challenging situations, it can provide motivation and strong beliefs, which will increase the degree of persistence and stimulate individual creative performance (Bandura, 1997). Self-efficacy is an important mechanism for self-regulation of social cognitive theory, because self-confidence allows individuals to fully utilize and use the resources they need to complete tasks and gain positive experience (Bandura, 1997). Savoring has been proven to maintain and enhance a

person's positive emotional experience (Bryant, 1989, 2003; Seligman, Rashid, & Parks, 2006). Individuals can fully appreciate positive experiences and emotions, and promote their creative thinking and creative ideas (Bryant & Veroff, 2007). Emotion is a psychological process related to creative thinking and one of the elements in the process of promoting innovative behavior (Amabile, et al., 2005). Lin (2013) found that college students' savoring has a significant positive impact on creative self-efficacy.

Therefore, Hypothesis H2: University teacher taste ability has a positive impact on creative self-efficacy.

Savoring is an indicator of positive emotions (Nelson & Simmons, 2003; Simmons, 2002). It is also the individual's ability to immerse pleasure in positive experiences, which is a positive emotion or affect. Aesthetic experience is a psychological process that is full of pleasure and combines the feelings, cognition and understanding of good things. Aesthetic experience is the process of interaction between cognition and emotion (Leder, Belke, Oeberst, & Augustin, 2004). Related studies have shown that when individuals pay attention to the concentration of good things, people will experience more aesthetic experience (Ferguson & Sheldon, 2013). Savoring proposed by Bryant and Veroff (2007) is the ability to actively feel the experience of positive emotion, while positive emotion is closely related to the innovative behavior. Bryant and Veroff argue that savoring contributes to the improvement of creativity, and creativity contributes to the improvement of individual creative performance.

Studies have found that creative self-efficacy has a mediating effect on the generation of individual creative behavior and creativity (Hong et al., 2008; Chen &

Guo, 2013). The aesthetic experience is an experience generated by the individual cognitive process, so self-efficacy may mediate the individual's aesthetic experience and behavioral performance. Scholars also agree that aesthetic experience promotes innovative behavior and develops individual creativity through individual self-efficacy (Lin, 2009; Dewey, 1981; Lussier, 2010).

Therefore, this study assumes that university teachers' savoring will influence innovative behavior through creative self-efficacy and aesthetic experience.

So this study assumes the following:

Hypothesis 8: University teachers' creative self-efficacy has a mediating effect on the relationship between savoring and innovative behavior.

Hypothesis 9: Aesthetic experience of university teachers has a mediating effect on the relationship between savoring and innovative behavior.

CHAPTER 3

RESEARCH METHODS

3.1 Research Structure

This study aims to explore the influence of university teachers' savoring on teachers' innovative behaviors, and to explore the mediating effects of creative self-efficacy and aesthetic experience. Lin (2013) found that college students' savoring has a significant positive impact on creative self-efficacy. Chang, Wang and Lee (2015) found that savoring affects individual creative performance through creative self-efficacy. Individual creative self-efficacy plays an important intermediary role in this regulatory process (Bandura, 1982, 1989). Adopting some specific savoring strategies will enhance people's aesthetic experience. For example, the use of reminiscence construction can prolong the positive memories (Bryant, Yamold, & Morgan, 1991), university teachers' aesthetic experience has a positive influence on creative self-efficacy (Biswas et al., 2010; Kinnebrew & Biswas, 2011), and scholars agree that aesthetic experience promotes innovative behavior and develops individual creativity through individual self-efficacy (Lin, 2009; Maquet, 2003; Dewey, 1981).

Based on literature reviews and research purposes, according to the theory of creativity, it is found that the diversity and uniqueness of creativity make it difficult to define creativity. In the fields of education, business management, science and art, for the purpose of sustainable development, innovation and changes have been going on in those fields, so creativity plays an important role (Runco, 2008). From the perspective of self-regulation in social cognitive theory, self-efficacy has played an

important central role in the self-regulatory system (Bandura, 1989, 1997).

According to Ford (1996), the theory of individual creative action is considered to be an action that determines an individual's ability to engage in creative performance or follow a habit; among them, ability beliefs and emotions are important motivational factors. Fredrickson's (2005) expansion and construction theory points out that when individuals are in a state of pleasure and happiness, they have better cognitive flexibility and behavioral tendencies, and these flexible thinking and behavioral tendencies will promote the generation of positive innovative behaviors.

Therefore, this study will use university teachers as the research object to explore the influence of university teachers' savoring on innovative behavior as well as to explore the mediating effect of creative self-efficacy and aesthetic experience, as shown in Figure 3.1.

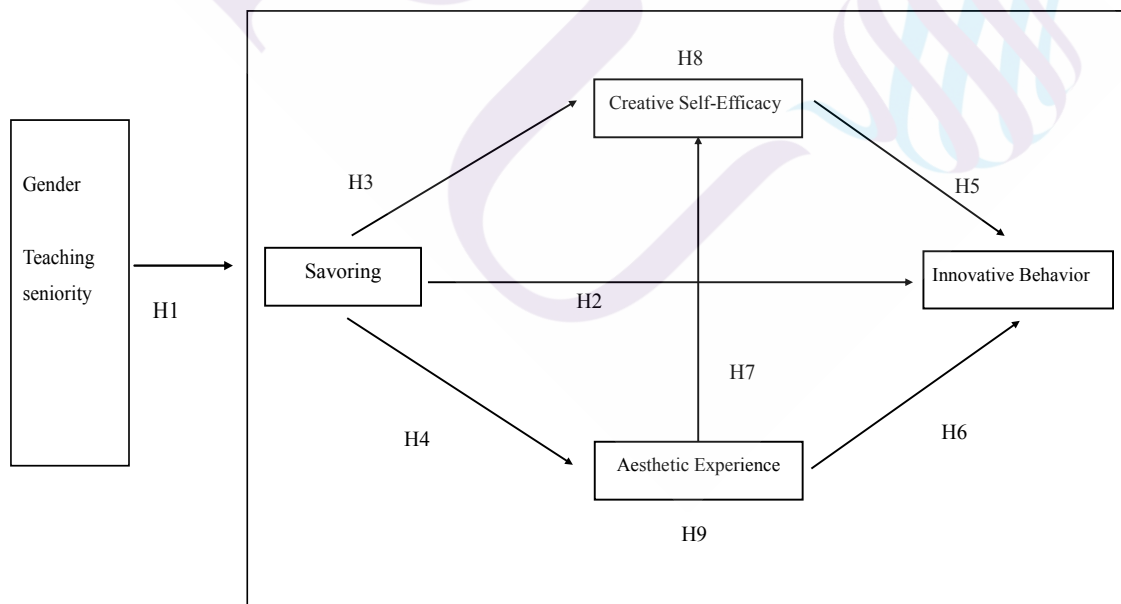


Figure 3.1 Research structure

Sources: Bryant and Veroff (2007); Chang, Wang and Lee (2015); Lin (2009); Hong (2004)

The savoring proposed by Bryant and Veroff (2007) is the ability to actively feel the experience of positive emotion, while the positive emotion is closely related to the innovative behavior. Lin (2013) found that college students' savoring has a significant positive impact on creative self-efficacy. Hong (2004) found that creative self-efficacy can enhance an individual's intrinsic motivation, which in turn affects the generation of innovative behavior. Chang et al. (2015) found that savoring affects individual creative performance through creative self-efficacy.

Organizational members with savoring produce immersive concentration in the process of savoring, accumulate experience, and thus increase the chances of problem solving (Bryant & Veroff, 2007). Adopting specific taste strategies will enhance people's aesthetic experience (Bryant, Yamold, & Morgan, 1991). The aesthetic experience, through the combination of subconsciousness and consciousness, will be the potential energy to initiate innovative behavior and may play a role in the next innovative behavior (Lin, 2009). Aesthetic experience promotes innovative behavior and develops individual creativity through the individual's own self-efficacy (Lin, 2009; Maquet, 2003; Dewey, 1981). Based on the above literature, the proposed research structure is shown in Figure 3.1.

3.2 Research Hypotheses

The hypotheses related to testing and research questions are as follows:

H1: There are significant differences in the savoring, creative self-efficacy, aesthetic experience, and innovative behavior in university teachers of different backgrounds;

H1.1: There are significant differences in the savoring, creative self-efficacy,

aesthetic experience, and innovative behavior of university teachers of different genders;

H1.2: There are significant differences in the savoring, creative self-efficacy, aesthetic experience, and innovative behavior of university teachers of different teaching ages;

H2: University teachers' savoring has a positive impact on their innovative behavior;

H3: University teachers' savoring has a positive impact on creative self-efficacy;

H4: University teachers' savoring has a positive impact on aesthetic experience;

H5: The creative self-efficacy of university teachers has a positive impact on innovative behavior;

H6: The aesthetic experience of university teachers has a positive impact on innovative behavior;

H7: The aesthetic experience of university teachers has a positive impact on creative self-efficacy;

H8: University teachers' creative self-efficacy has an intermediary effect on the relationship between savoring and innovative behavior;

H9: University teachers' aesthetic experience has an intermediary effect on the relationship between savoring and innovative behavior.

3.3 Data Collecting

Teachers' forums were held in the form of investigation and research to

collect questionnaires according to the unified guidance. From February 24 to 28, 2019, questionnaires were collected on the spot in Qingdao Agricultural University in Qingdao, Shandong Yingcai University in Jinan, and The Jining Polytechnic in Jining City. From April 3-10, 2019, questionnaires were collected on the spot in Shandong University of Arts, Shandong Women's University, Shandong Management University, Shandong Xiehe University (private), Qilu Institute of Technology (private), Shandong Urban Construction Vocational College, Shandong Vocational College of Art and Design, Jinan. From April 11-17, 2019, questionnaires were collected on the spot at Qingdao University, Qingdao University of Science and Technology, Qingdao Agricultural University, and Shandong University of Science and Technology (Qingdao Campus). 14 questionnaires were collected on the spot from colleges and universities, accounting for 43.75% of the total universities.

Data generated through online surveys were collected from another 18 colleges and universities. Surveys conducted over the network reduce implementation time and increase the efficiency of developing, reproducing, and managing surveys (Dillman, 2007). Relevant participants were contacted through the Shandong Teachers Center and with the help of university teachers and researchers. Informed consent was provided to potential participants via email, and the researcher sent them an email invitation to participate in the questionnaire survey: The impact of university teachers' savoring on innovative behavior: Creative self-efficacy and aesthetic experience playing an intermediary role.

3.4 Research Targets, Sampling and Testing

3.4.1 Research targets

Shandong Province, which has the third largest number of Chinese universities, is selected as the research target. There are 146 colleges and universities in Shandong Province, including 70 universities and colleges that offer undergraduate and above degrees and 76 vocational colleges (Ministry of Education, 2019). Creswell (2005) once stated: “In the convenience sampling, the researchers choose individuals because they are available and convenient, and represent some of the characteristics that researchers seek to study.” This study used convenience sampling to select 32 schools in seven cities in Shandong Province. A total of 822 samples of college teachers were analyzed. The seven cities are Qingdao and Yantai in the eastern part of Shandong Province, Jinan City and Tai'an City in the central region, Heze City, Jining City and Liaocheng City in the western region.

From the geographical distribution, Shandong Province has a large east-south span, and according to topography, this province is divided into the eastern peninsula, the central mountains and hills, and the plains in the west. Therefore, the cities selected from the eastern, central and western regions of Shandong Province are representative. The six universities in the east are China Ocean University (985, 211 university) in Qingdao, Qingdao University, Qingdao University of Science and Technology, Qingdao Agricultural University, Shandong University of Science and Technology (Qingdao Campus), and Yantai Engineering and Technology College in Yantai City; 22 universities in Central China are Shandong University (985, 211 university), Shandong Normal University, Jinan University, Shandong University of Finance and Economics, Shandong Jianzhu University, Qilu University of Technology, Shandong Jiaotong University, Shandong University of Arts, Shandong University of Art and Design, Shandong University of Political Science and Law,

Shandong Women's University, Shandong Management University, Shandong Youth University of Political Science, Shandong Yingcai University (private), Shandong Xiehe University (private), Qilu Institute of Technology (private), Shandong Institute of Commerce and Technology, Shandong Urban Construction Vocational College, Shandong College of Tourism Hospitality, Jinan Engineering Vocational and Technical College, Shandong Vocational College of Art Design, Shandong Agricultural University (Tai'an Campus) of Tai'an City; Heze University of Heze City, Liaocheng University of Liaocheng, Qufu Normal University and Jining Polytechnic of Jining City. Among the 32 colleges and universities selected, there are 2 key universities that offer undergraduate and above degrees that belong to the 985 and 211 universities, 20 undergraduate universities and colleges, 3 private undergraduate universities and colleges and 7 vocational colleges. The 32 universities selected accounted for 21.92% of the universities in Shandong Province (146). Among them, 25 undergraduate universities and colleges accounted for 35.71% of Shandong undergraduate universities and colleges (70), and 7 vocational colleges accounted for 9.21% of Shandong vocational colleges (76).

3.4.2 Pre-sample sampling

Located in the central part of Shandong Province, Jinan is the provincial capital and sub-provincial city of Shandong Province. It is the political, cultural, educational, transportation and science and technology center of Shandong Province. Qingdao is located in the eastern part of Shandong Province and belongs to the sub-provincial city of Shandong Province. It is also the center for international ocean research and education. Jining City is located in the southwest of Shandong Province, with a long history and culture. Pre-testing selects university teachers from Jinan,

Qingdao, and Jining universities as the survey subjects of this study. In the form of investigation and research, a teacher forum was held in their colleges and universities, the testing was conducted according to the unified guidance, and subjects were informed of the purpose of this research, as well as the rules of keeping confidentiality, filling in the requirements, and the participants filled out the questionnaire according to their own real situation. A total of 200 questionnaires were distributed on the spot, 200 were recovered, and the recovery rate was 100%, of which 198 were valid questionnaires, accounting for 99% of the total number of questionnaires.

3.4.3 Formal sample sampling

The formal sampling and sampling method of this study was conducted according to Qiu (2009), which pointed out that the sample should have sufficient verification power, and the number of samples in the group should not be too small, and the number of groups should be greater than 20. Formal surveys were conducted in 32 universities in the cities of Jinan, Tai'an, Qingdao, Yantai, Heze, Jining and Liaocheng. The university teachers in the above universities and colleges were selected as the survey subjects of this study. 25-35 copies of questionnaires were distributed to each college or university and a total of 900 copies were distributed, among which, 845 were recovered, and the recovery rate was 93.8%, of which 822 were valid questionnaires, accounting for 97.2% of the questionnaires.

3.4.4 Study sample distribution

A total number of 822 valid questionnaires were collected in this study, the purpose of which was to understand the distribution of population variables in the study sample. First, a narrative statistical analysis of the sample was conducted,

including narrative statistical information such as the mean, standard deviation, and correlation coefficient of each variable.

According to Table 3.1, in terms of gender, there are 411 males and 411 females. In terms of education, there are 408 teachers with master degrees, 316 with doctoral degrees, and 90 with undergraduate degrees. The minimum number of teachers with junior college degree and below is 8. 270 of the participants are between 36-45 years old, which accounts for the largest age group. The second largest age group is from 31-35 years old, with 228 teachers in total. The 30-year-old and below are 193, the 46-55 is 115, and the 56-year-old is 16. 356 of the teachers have the maximum number of teaching ages of 5 years and below, followed by 230 teachers with teaching ages of 6-10 years, 151 teachers with teaching ages of 11-15 years, 50 teachers with 16-20 years of teaching ages, and at least 35 of them have teaching ages of 21 years and above. As for the marital status, 561 of the teachers were married, accounting for the largest number of the participants; 240 are unmarried, and 21 of them have other marital status. In terms of academic titleship, 377 of them are assistant professors, which accounts for the largest number of teachers, followed by 240 associate professors. There are 113 of them who are full professors, and 92 of them are instructors.

Table 3.1 Distribution of demographic variables

	Items	Number	percentage	Cumulative percentage
Gender	male	411	50.0	50.0
	female	411	50.0	100.0
Degrees	Associate degrees and under	8	1.0	1.0
	Bachelor's	90	10.9	11.9
	Master's degree	408	49.6	61.6
	Doctor's degree	316	38.4	100.0
Ages	30 and under	193	23.5	23.5
	31–35	228	27.7	51.2
	36–45	270	32.8	84.1
	46–55	115	14.0	98.1
	56 and above	16	1.9	100.0
Teaching ages	5 years and under	356	43.3	43.3
	6–10 years	230	28.0	71.3
	11–15 years	151	18.4	89.7
	16–20 years	50	6.1	95.7
	21 years and above	35	4.3	100.0
Marital status	Unmarried	240	29.2	29.2
	Married	561	68.2	97.4
	others	21	2.6	100.0
Academic titleship	instructorship	92	11.2	11.2
	Assistant professorship	377	45.9	57.1
	Associate professorship	240	29.2	86.3
	Full professorship	113	13.7	100.0

Note: N=822 Sources: from this study

3.5 Research Tools

This research adopts the questionnaire survey research method. The research tools used include the basic data questionnaire, the savoring scale, the innovative behavior scale, the creative self-efficacy scale, the aesthetic experience scale. All those scales underwent a reliability analysis, followed by confirmatory factor analysis (CFA), to test the internal model quality of each scale and its degree of fit. The specific instructions are as follows:

3.5.1 Basic information questionnaire

The basic information questionnaire includes gender, age, education level, professional title level, grade of teaching, number of years of teaching, and organization of current positions. All items are written on a nominal scale and are selected by the participants based on their actual circumstances.

3.5.2 Savoring scale

Savoring refers to the individual's ability to immerse individual pleasure when expecting an upcoming positive event, a savoring of positive feeling of the current events, and a positive experience of the past. The Savoring Beliefs Inventory (SBI) developed by Bryant (2003) includes three aspects of expected savoring, current savoring and recall savoring. Although the scale is simple, it reflects the belief in savoring, similar to the Way of Savoring Checklist (WOSC) (Bryant & Veroff, 2007).

This measurement tool divides savoring into ten subscales: sharing with people, immersion focus, behavioral expression, comparison, perceptual acumen, reminiscence construction, self-motivation, perceptual sensation, recall of blessings, and disappointing thinking. The entire scale focuses on the strategies of savoring, but

lacks evidence of rigorous validity. Researchers Lee and Jeng (2014), in conjunction with Bryant (2003), Bryant and Veroff (2007), self-edited a scale that emphasizes the “capability” of savoring orientation, and used this scale to study the effect of savoring of small and medium-sized teachers on their innovative behavior, and achieved good levels of reliability and validity. This study will use the teacher-oriented savoring scale compiled by Lee and Jeng (2014). The scale has two dimensions and 10 questions. The two dimensions are the “imagined happiness” and “pleasant experience.” The items in the “imagined happiness” include: “I have the ability to reminisce about the good past,” “I have the ability to optimistically imagine the future,” “I have the ability to recount the lucky events of the past,” “I have the ability to associate things with pleasure,” “I have the ability to meditate on the joy of life.” Items in “Pleasant experience” include: “I have the ability to share happiness with others,” “I have the ability to completely relax and be immersed in happiness,” “I have the ability to fully express the feelings of happiness,” “I have the ability to create an atmosphere full of laughter,” “I have the ability to engage in happy activities.” This scale used the Likert five-point scale measurement, ranging from full agreement (5 points), agreement (4 points), no opinion (3 points), disagreement (2 points), to complete disagreement (1 point).

After the first draft was completed, the researchers sampled 200 college teachers from Shandong Province to conduct small-scale tests and modified the wording to become pre-test scales based on test opinions. After the completion of the pre-test sampling, the researchers sampled 822 teachers from Shandong universities for formal testing. After collecting the empirical data, based on the recommendation of Noar (2003), any single item will be deleted from the total samples that has a

correlation less than 0.3 with the total scores of all the questions, and has the absolute value of the skew greater than 1 and the absolute value of the kurtosis greater than 2.

3.5.2.1 Items analysis

This scale has a total of 10 questions. As shown in Table 3.2, it is found from the analysis of the savoring scale items that the CR value of each topic of savoring is between 7.001 and 10.983, both exceeding 0.3 or more, all reaching statistically significant levels ($P < 0.001$). After correction, the total correlation of the items is between 0.526 and 0.704, and the correlation of average items is all over 0.4, both reaching significant levels (Qiu, 2013). The commonality of each item is between 0.400 and 0.632, both greater than 0.3. The standard load of each item is between 0.633 and 0.794, which is greater than the standard of 0.45.

Table 3.2 Analysis of the items of the savoring scale

N of Q	Items	Average	Skewedness	Confirmatory Reliability (CR)	Correlation after correction	Commonality	Load factor
A1	I have the ability to reminisce about the good past.	4.17	-1.484	9.037***	0.612	0.510	0.714
A2	I have the ability to optimistically imagine the future.	4.14	-1.083	10.579***	0.704	0.632	0.795
A3	I have the ability to recount the lucky events of the past.	4.01	-1.027	7.001***	0.644	0.400	0.633
A4	I have the ability to associate things with pleasure.	4.09	-0.884	7.723***	0.526	0.420	0.648
A5	I have the ability to meditate on the joy of life.	4.07	-0.968	9.781***	0.618	0.538	0.734
A6	I have the ability to share happiness with others.	4.22	-1.069	10.956***	0.680	0.604	0.777
A7	I have the ability to completely relax and be immersed in happiness.	4.01	-0.932	10.197***	0.665	0.533	0.730
A8	I have the ability to fully express the feelings of happiness.	4.05	-0.979	10.983***	0.704	0.575	0.758
A9	I have the ability to create an atmosphere full of laughter.	4.07	-0.844	8.181***	0.660	0.511	0.715
A10	I have the ability to engage in happy activities.	4.13	-1.097	9.403***	0.660	0.567	0.753

Sources: from this study

3.5.2.2 Reliability analysis of savoring scale

The savoring scale was used for reliability analysis. The Cronbach's α value for the Imagined Happiness was 0.825, and the Cronbach's α value for the Pleasant Experience was 0.858, with the Cronbach's α value for the overall scale being 0.745. All the various dimensional items met the criteria (see Table 3.3).



Table 3.3 The reliability analysis summary table for savoring scale

Dimensions	N of Q	Average	SD	Corrected Correlation	Square complex correlation	Cronbach's α after item deletion	Dimensional Cronbach's α
Imagined	A1	4.17	0.792	0.612	0.409	0.792	0.825
Happiness	A2	4.14	0.703	0.704	0.502	0.767	
	A3	4.01	0.751	0.644	0.422	0.783	
	A4	4.09	0.748	0.526	0.314	0.816	
	A5	4.07	0.757	0.618	0.387	0.790	
	A6	4.22	0.732	0.680	0.481	0.827	0.858
Pleasant Experience	A7	4.01	0.828	0.665	0.460	0.831	
	A8	4.05	0.785	0.704	0.505	0.820	
	A9	4.07	0.751	0.660	0.437	0.831	
	A10	4.13	0.749	0.660	0.461	0.831	
Overall Cronbach's α			0.900				

Sources: from this study

3.5.2.3 Analysis of confirmatory factors of savoring scale

In the basic degree of fit, the measurement error of this scale is between 0.438 and 0.564, and there is no negative error variation, and both reach a significant level of 0.05. In addition, the factor load is between 0.66 and 0.75. Therefore, the basic degree of fit of the model is roughly in line with the fit criteria. On the other hand, the χ^2 value of this scale is 148.602, reaching a significant level, while the RMSEA value is 0.064. Although it is greater than the strict standard of 0.05, the P value is still less than 0.00, indicating that the theoretical model and the observed data still have a good fit. The GFI is 0.964, the AGFI is 0.942, and the NFI, CFI, and IFI

are 0.956, 0.966, and 0.966, respectively. The results of the analysis show that the testing of scale in terms of overall fit is quite good, showing the fit of the theoretical model to the observed data. In terms of the internal structural degree of fit of the model and the compositional reliability of the potential variable, the Imagined Happiness and the Pleasant Experience reached 0.813 and 0.834 respectively, all overpassing the evaluation criteria of 0.60 or higher. The average variability is 0.465 for Imagined Happiness and 0.503 for Pleasant Experience, both of which meet the evaluation criteria of 0.45 or higher. The results show that the fit of this scale is quite good and has good reliability and validity. The confirmatory factor analysis and model fitting index table of the scale are shown in Table 3.4 and Table 3.5, and the results of the confirmatory factor analysis model are shown in Figure 3.2.

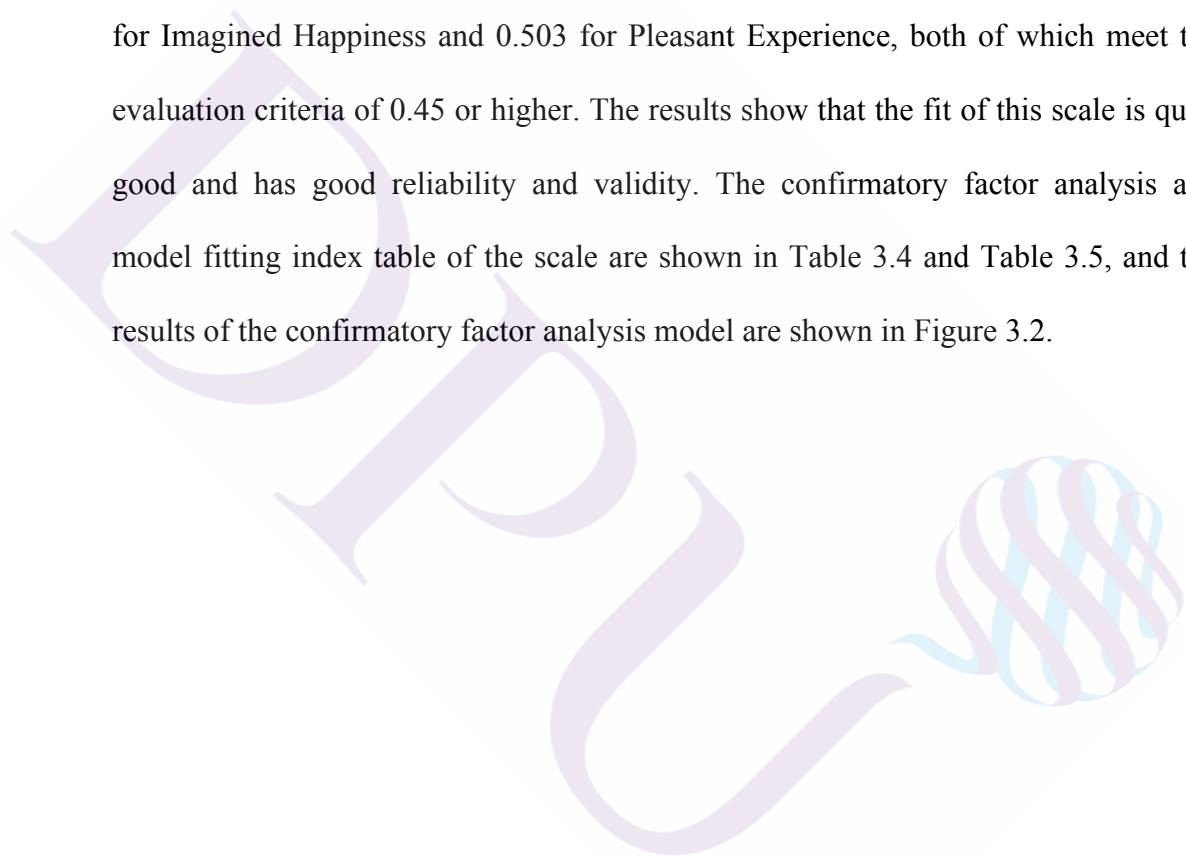


Table 3.4 Summary table of confirmatory factor analysis of savoring scale

Dimensions	N of Q	Factor Load	Std Error	Confirmatory Reliability (CR)	AVE
Imagined				0.813	0.465
Happiness	A1	0.66	0.564		
	A2	0.67	0.551		
	A3	0.69	0.524		
	A4	0.68	0.538		
	A5	0.71	0.496		
Pleasant				0.834	0.503
Experience	A6	0.67	0.551		
	A7	0.66	0.564		
	A8	0.75	0.438		
	A9	0.71	0.496		
	A10	0.75	0.438		

Sources: from this study

Table 3.5 Savoring scale model fitting index table

Model	χ^2 value (p)	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI
Savoring	148.602***	4.371	0.064	0.964	0.942	0.956	0.966	0.966

Note: N=822 Sources: from this study

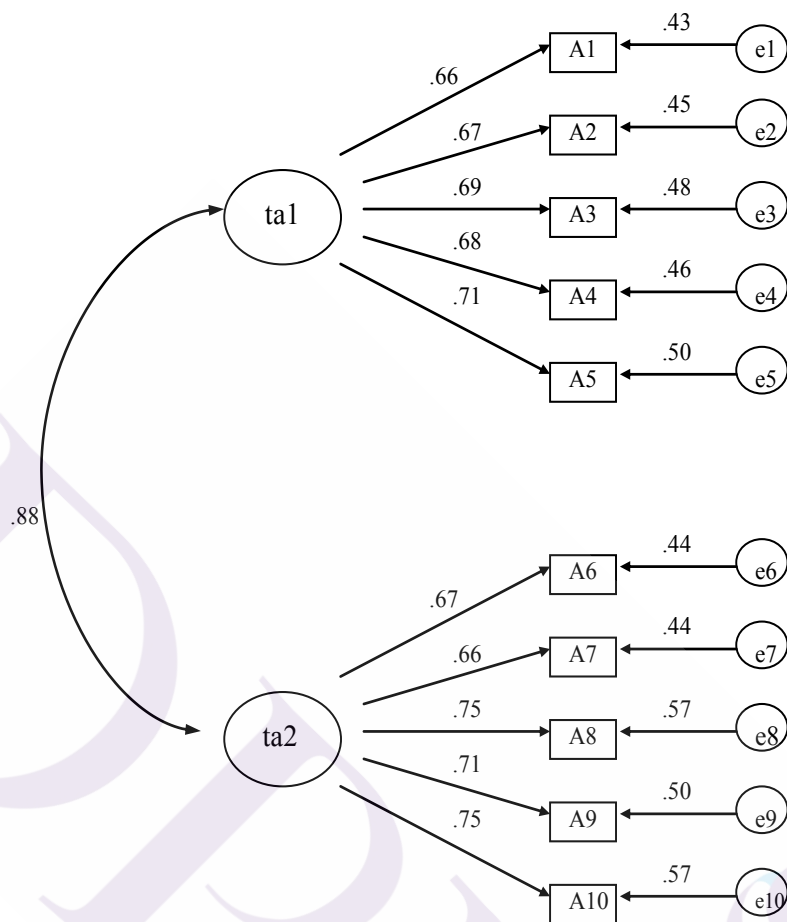


Figure 3.2 Savoring verification factor analysis model

Note: *ta1*: Imagined happiness, *ta2*: Pleasant experience, A1-A10: Relevant items

3.5.2.4 Discriminant validity

This study will apply Chi-square difference test to detect the discriminant validity. Firstly, it will allow the correlation coefficient between any two factors in the model to be freely estimated (the correlation coefficient is not equal to 1). In so doing, it will get the model of unconstrained chi-square value. Secondly, comparatively, it will set the correlation coefficient between the two factors at 1 to get the restricted model of chi-square value. When the difference of chi-square value ($\Delta\chi^2$) between

them exceeds $\chi^2_{1,0.05}=3.84$, it means that the null hypothesis ($H_0 : \rho=1$) is wrong. That is to say, the acceptance factors are not completely correlated; rather, the two factors are different ($H_0: \rho \neq 1$). The results of the analysis, as shown in Table 3.7, illustrate that the differences between the two factors in the restricted and unrestricted modes of the Chi-square difference is 74.940, higher than 3.84, which reaches a significant level. This result suggests that there are differences between the two factors. In other words, the scale has differential validities. As illustrated in Table 3.6, a summary of the restricted mode of potential variable.

Table 3.6 A summary of the restricted mode of potential variable

Model	χ^2/df	RMR	GFI	AGFI	NFI	CFI	RMSEA
Default model	4.371	0.023	0.964	0.942	0.956	0.966	0.064
ta1 vs ta2	6.387	0.028	0.944	0.912	0.934	0.943	0.081

Sources: from this study

Table 3.7 A summary of potential variable scales

Constitution	Restricted model ($\varphi_{ij}=1$)		Standard Model ($\varphi_{ij}=\text{free}$)		$\Delta\chi^2$
	χ^2	df	χ^2	df	
Factor A vs B	223.542***	35	148.602***	34	74.940***

*** $p<0.001$

3.5.3 Individual innovative behavior scale

Individual creativity refers to the fact that individuals are engaged in creative activities, such as project creation, to produce novel and appropriate ideas, products, processes and solutions (Chang, et al., 2015). Researchers have developed and validated a variety of scales for individual innovative behavior. The widely used Individual Innovative Behavior Scale is Scott and Bruce's (1994) Individual Innovative Behavior Scale and Zhou and George's (2001) Individual Innovative Scale. Scott and Bruce (1994)'s Individual Innovation Behavior Scale is a one-dimensional six-item scale with a Cronbach's Alpha value of 0.89. Zhou and George's (2001) Individual Innovative Scale is a 13-item individual innovative scale with a Cronbach's Alpha value of 0.96, which is more reliable but less useful.

This study examines whether the creative self-efficacy and aesthetic experience will mediate teachers' savoring and teachers' innovative behavior, while teachers' innovative behavior requires employees' change of the inner mind, which is subjective. Therefore, this study uses Chinese scholars Zhang and Shi (2008) employee innovative behavior scale based on Scott and Bruce's (1994) employee innovative behavior scale, with translations and revisions based on the characteristics of the Chinese cultural background. The items included in this scale are: "At work, I will actively seek to apply new methods." "I often generate meaningful ideas and innovative ideas." "I will communicate and market my new ideas to leaders." "To realize my new ideas, I will find ways to get the resources I need." "I will actively develop appropriate plans for implementing innovative ideas." "Overall, I am an innovative and creative person."

3.5.3.1 Items analysis

This scale has a total of 6 questions, as shown in Table 3.8. According to the analysis of the Innovative Behavior Scale, the CR value of each topic of the Innovative Behavior Scale is between 9.879 and 11.988, both exceeding 0.3 or more, and all reaching statistically significant levels ($P < 0.001$). After correction, the total correlation of the project is between 0.677 and 0.772, with the item average correlations all over 0.4, both reaching significant levels (Qiu, 2013). The commonality of each item is between 0.604 and 0.724, all greater than 0.3. The load of each item is between 0.777 and 0.851, both of which are greater than 0.4.

Table 3.8 Analysis of innovative behavior scale

N of Q	Items	Average	Skewedness	(CR)	Corrected correlation	Commonality	Factor Load
	At work, I will						
D1	actively seek to apply new methods.	4.06	-0.563	11.988***	0.772	0.724	0.851
	I often generate						
D2	meaningful ideas and innovative ideas.	4.08	-0.789	10.609***	0.677	0.604	0.777
	I will communicate						
D3	and market my new ideas to leaders.	3.97	-0.724	12.020***	0.683	0.612	0.782
	To realize my new						
D4	ideas, I will find ways to get the resources I need.	4.03	-1.084	9.879***	0.726	0.669	0.818
	I will actively						
D5	develop appropriate plans for implementing innovative ideas.	4.08	-1.209	10.309***	0.751	0.700	0.836
	Overall, I am an						
D6	innovative and creative person.	4.03	-0.640	11.372***	0.700	0.638	0.798

Note: CR: confirmatory reliability

Sources: from this study

3.5.3.2 Reliability analysis

A reliability analysis was performed on the Innovative Behavioral Scale, with a Cronbach's α value of 0.894 and the items are in compliance with the standard (see Table 3.9).

Table 3.9 The reliability analysis summary table for innovative behavior scale

N of Q	Average	SD	Corrected Correlation	Square complex correlation	Cronbach's α after item deletion	Dimensional Cronbach's α
D1	4.06	0.681	0.772	0.604	0.868	0.894
D2	4.08	0.747	0.677	0.507	0.882	
D3	3.97	0.783	0.683	0.506	0.882	
D4	4.03	0.747	0.726	0.600	0.875	
D5	4.08	0.736	0.751	0.621	0.871	
D6	4.03	0.743	0.700	0.542	0.879	

Sources: from this study

3.5.3.3 Analysis of confirmatory factors of innovative behavior scale

In the basic degree of fit, the measurement error of this scale is between 0.422 and 0.467, and there is no negative error variation, and both reach a significant level of 0.05. In addition, the factor load is between 0.73 and 0.76. Therefore, the scale of the model is roughly in line with the degree of fit criteria. On the other hand, the χ^2 value of this scale is 40.552, reaching a significant level, while the RMSEA value is 0.065. Although it is greater than the strict standard of 0.05, the P value is still less than .00, indicating that the theoretical model and the observed data still have a good fit. Specifically, the GFI is 0.984, the AGFI is 0.963, and the NFI, CFI, and IFI

are 0.982, 0.986, and 0.986, respectively. The results show that the scale is tested in terms of overall fit, showing that the fit of the theoretical model to the observed data is quite good. In the internal structural degree of fit of the model, the compositional reliability of the potential variable is 0.884, which conforms to the standard of 0.6 or higher, and the average extracted variation is 0.561, which meets the evaluation criteria of 0.5 or higher. The results show that the fit of this scale is quite good and has good reliability and validity. The confirmatory factor analysis and model fitting index table of the scale are shown in Table 3.10 and Table 3.11, and the results of the confirmatory factor analysis model are shown in Figure 3.3.

Table 3.10 Summary table of confirmatory factor analysis of innovative behavior scale

N of Q	Factor Load	Std Error	Confirmatory Reliability (CR)	AVE
D1	0.730	0.467	0.884	0.561
D2	0.750	0.438		
D3	0.740	0.452		
D4	0.750	0.438		
D5	0.760	0.422		
D6	0.760	0.422		

Sources: from this study

Table 3.11 Innovative behavior scale model fitting index table

Model	χ^2 value (p)	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI
Innovative Behavior	40.552***	4.506	0.065	0.984	0.963	0.982	0.986	0.986

Note: N=822 Sources: from this study

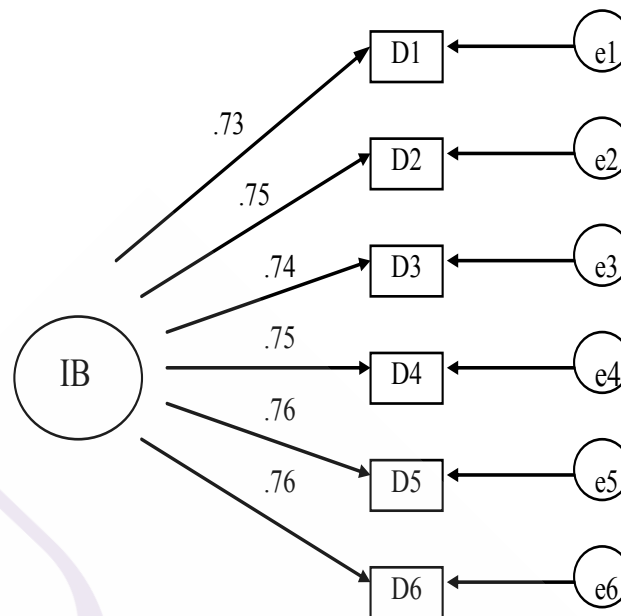


Figure 3.3 Innovative behavior verification analysis model

Note: IB: Innovative behavior, D1-D6: Relevant items

3.5.4 Creative self-efficacy scale

Creative self-efficacy originated from self-efficacy. Bandura believes that self-efficacy will exhibit different manifestations in different situations, which will result in different self-efficacy under specific environmental conditions. Creative self-efficacy refers to the ability of individuals to believe in their own creativity. When engaging in creative activities, they are confident of facing creative challenges and working hard to achieve their goals. Based on Bandura's self-efficacy-related research and Amabile's (1996) concept of creativity, Tierney and Farmer (2002) first explicitly proposed the concept of "creative self-efficacy" in the field of innovation. Since then, more and more scholars have conducted research on creative self-efficacy. The measurement of creative self-efficacy is an important part of the research on creative self-efficacy. The existing research shows that the measurement scale of creative self-efficacy mainly focuses on employee self-efficacy of the organizations and the creative self-efficacy of students (including primary and secondary schools and college students). Based on the Student Creative Self-Efficacy Measurement Scale, the authors Hong and Lin (2010) compiled the Creative Self-Efficacy Scale. The main measurement target of the scale is primary and secondary school students, targeting three dimensions: creative thinking strategy belief, creative finished product belief, and anti-negative evaluation belief.

Researcher Cai (2012) revised the 7-question creative self-efficacy scale suitable for Chinese cultural background with reference to the scale compiled by foreign scholars Carmeli and Schaubroeck (2007). The questions include: "I can use creative ways to achieve most of the goals I set for myself." "When faced with difficult tasks, I am sure that I can do it creatively." "I believe that for what I am

determined to do, I am committed to doing it in the most creative ways.” “I can creatively overcome many challenges.” “I am confident that I can accomplish many different tasks creatively.” “Compared to others, I can do most of the tasks creatively.” “Even if things are harder, I can still do them very creatively.” In terms of the measurement method, the Likert five-point scale measurement was used, ranging from extremely disagree to extremely agree. The higher the score is, the higher the teachers’ creative self-efficacy is.

3.5.4.1 Items analysis

This creative self-efficacy scale has a total of 7 questions, as shown in Table 3.10. According to its analysis, the CR value of each item of this scale is between 9.174 and 12.639, both exceeding 0.3 or more, all reaching statistically significant levels. ($P < 0.001$); after correction, the total correlation of the items is between 0.583 and 0.765, and the items are all over 0.4, and both reach significant levels (Qiu, 2013). The commonality of each item is between 0.685 and 0.841, both greater than the standard of 0.3. The factor load of each item is between 0.469 and 0.708, which is greater than the standard of 0.45.

Table 3.12 Analysis of creative self-efficacy scale items

N of Q	Item	Average	Skewedness	(CR)	Corrected correlation	Commonality	Factor load
B1	I can use creative ways to achieve most of the goals I set for myself.	3.97	-0.838	9.174***	0.583	0.685	0.469
B2	When faced with difficult tasks, I am sure that I can do it creatively.	3.96	-0.768	9.811***	0.700	0.788	0.620
B3	I believe that for what I am determined to do, I am committed to doing it in the most creative ways.	4.09	-0.877	10.608***	0.681	0.776	0.603
B4	I can creatively overcome many challenges.	4.06	-0.999	10.100***	0.668	0.763	0.582
B5	I am confident that I can accomplish many different tasks creatively.	3.89	-0.837	12.639***	0.765	0.841	0.708
B6	Compared to others, I can do most of the tasks creatively.	3.97	-0.749	11.878***	0.709	0.796	0.633
B7	Even if things are harder, I can still do them very creatively.	3.83	-0.811	10.421***	0.706	0.793	0.628

Note: Confirmatory reliability

Sources: from this study

3.5.4.2 Reliability analysis of the creative self-efficacy scale

Reliability analysis was performed on the creative self-efficacy scale, and its Cronbach's α value is 0.891, and all the items are in line with the standard(see Table 3.13).

Table 3.13 The reliability analysis summary table for creative self-efficacy scale

N of Q	Average	SD	Corrected Correlation	Square complex correlation	Cronbach's α after item deletion	Dimensional Cronbach's α
B1	3.97	0.747	0.583	0.373	0.887	0.891
B2	3.96	0.743	0.700	0.525	0.873	
B3	4.09	0.721	0.681	0.524	0.876	
B4	4.06	0.782	0.668	0.482	0.877	
B5	3.89	0.783	0.765	0.633	0.865	
B6	3.97	0.793	0.709	0.549	0.872	
B7	3.83	0.853	0.706	0.553	0.873	

Sources: from this study

3.5.4.3 Confirmatory factors Analysis of the creative self-efficacy scale

In the basic degree of fit, the measurement error of this scale is between 0.422 and 0.524, and there is no negative error variation, both reaching a significant level of 0.05. In addition, the factor load is between 0.69 and 0.76. Therefore, the degree of fit of the model of this scale is roughly in line with the fit criteria. In addition, the χ^2 value of this scale is 136.117, reaching a significant level, while the RMSEA value is 0.103. Although it is greater than the strict standard of 0.08, the P value is still less than 0.00, indicating that the theoretical model and the observed data still have a good fit. The GFI is 0.952, the AGFI is 0.904, and the NFI, CFI, and IFI

are 0.950, 0.955, and 0.955, respectively. The results show that in terms of overall fit, the fit of the theoretical model to the observed data is quite good. In the internal structural degree of fit of the model, the compositional reliability of the potential variable is 0.890, which conforms to the standard of 0.6 or higher, and the average extracted variation is 0.536, which meets the evaluation criteria of 0.5 or higher. The results show that the degree of fit of this scale is quite good, having good reliability and validity. The confirmatory factor analysis and model fitting index table of the scale are shown in Table 3.14 and Table 3.15, and the results of the confirmatory factor analysis model are shown in Figure 3.4.

Table 3.14 Summary table confirmatory factor analysis of creative self-efficacy scale

N of Q	Factor Load	Std Error	Confirmatory Reliability (CR)	AVE
B1	0.690	0.524	0.890	0.536
B2	0.740	0.452		
B3	0.710	0.496		
B4	0.730	0.467		
B5	0.740	0.452		
B6	0.750	0.438		
B7	0.760	0.422		

Sources: from this study

Table 3.15 Creative self-efficacy scale model fitting index table

Model	χ^2 value (p)	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI
Creative Self-Efficacy	136.117***	9.723	0.103	0.952	0.904	0.950	0.955	0.955

Note: N=822 Sources: from this study

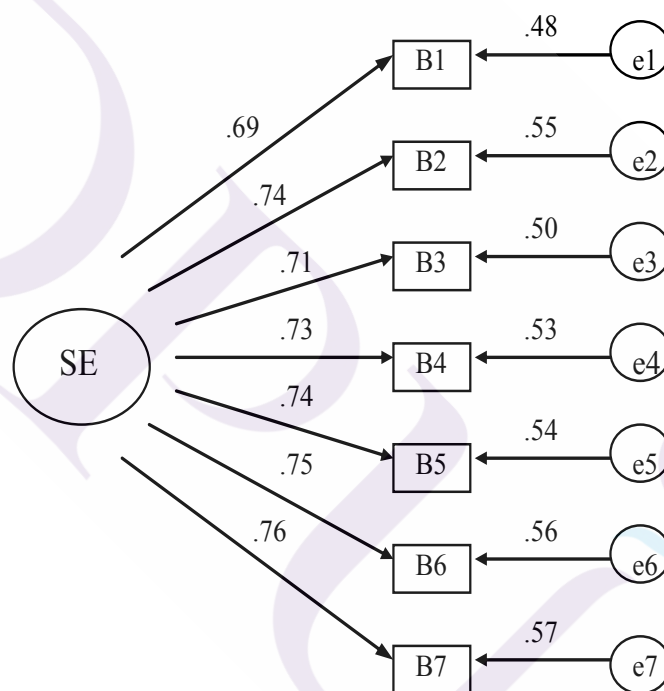


Figure 3.4 Creative self-efficacy verification factor analysis model

Note: SE: Creative self-efficacy, B1-B7: Relevant items

3.5.5 Aesthetic experience scale

In terms of the aesthetic experience scale, according to Cuieford (1965), when the Cronbach's α coefficient is higher than 0.7, it has high reliability. If it is between 0.35 and 0.7, it has a medium reliability, and if it is lower than 0.35, then it should be rejected. The aesthetic experience scale compiled by Chang (2017) is divided into four dimensions: aesthetic pleasure, attitude toward aesthetics, the understanding of aesthetics, and the complete experience. Among them, the Cronbach's α value for aesthetic pleasure is 0.895; Attitude toward aesthetics, 0.837; the understanding of aesthetics, 0.890; and the complete experience, 0.861. This scale has high reliability and is mostly used in studies of college students and other related research.

Therefore, this study uses this scale, and the Aesthetic Pleasure items include: "When I appreciate beautiful things, I feel happy." "When I appreciate colorful and harmonious things, I will feel relaxed and happy." "When I appreciate good things, I will feel happy and temporarily forget the things around me." "I like to appreciate and contact beautiful things." "I am sometimes unconsciously attracted by the beautiful things around me and feel happy." "I will feel happy and joyful if I accidentally find something beautiful." The Attitude toward Aesthetics items include: "I will accept and appreciate diverse cultural activities, such as different ethnic groups, beliefs, etc." "I will accept and appreciate the diverse ideas and suggestions put forward by others." "I will try to find good aspects of bad things." "When I contact beautiful things, it can stimulate my vitality and hope." "When I encounter difficulties or setbacks, I will appreciate it with a positive attitude." The Understanding of Aesthetics items include: "I can see the details of beautiful things that are easy to be

ignored by others.” “I can see the subtle and special details of good things.” “I can analyze the styles of beautiful things.” “I can understand the concept to be expressed by beautiful things.” “I can analyze reasons that make things beautiful.” The Complete Experience items include: “I will share and discuss things that I feel good with others.” “When I create works, I will unconsciously think of things that are related to them.” “When I create works, I will reminisce about the beautiful things that are related to them.” “When I create works, similar things I have seen before can suddenly flash through my mind.” “I will share my good experiences with others.”

3.5.5.1 Items analysis

The aesthetic experience scale has a total of 21 questions, as shown in Table 3.16. According to its analysis, the CR value of each item is between 7.554 and 11.956, both exceeding 0.3 or more, all reaching statistically significant levels. ($P < 0.001$). After correction, the total correlation of the items is between 0.633 and 0.743, and the items are all over 0.4, both reaching significant levels (Qiu, 2013). The commonality of each item is between 0.516 and 0.787, and the standards are all greater than 0.3. The factor load of each item is between 0.665 and 0.773, which is greater than the standard of 0.45.

Table 3.16 Analysis of the aesthetic experience scale items

N of Q	Items	Average	Skewedness	(CR)	Corrected Correlation	Commonality	Factor load
C1	When I appreciate beautiful things, I feel happy.	4.23	-1.081	9.092***	0.685	0.641	0.720
C2	When I appreciate colorful and harmonious things, I will feel relaxed and happy.	4.25	-0.935	7.554***	0.661	0.630	0.698
C3	When I appreciate good things, I will feel happy and temporarily forget the things around me.	4.07	-0.776	9.371***	0.671	0.625	0.707
C4	When I appreciate good things, I will feel happy and temporarily forget the things around me.	4.28	-1.166	7.721***	0.689	0.770	0.727
C5	I like to appreciate and contact beautiful things.	4.15	-0.824	11.956***	0.730	0.721	0.764
C6	I am sometimes unconsciously attracted by the beautiful things around me and feel happy.	4.24	-0.811	10.535***	0.738	0.663	0.772
C7	I am sometimes unconsciously attracted by the beautiful things around me and feel happy.	4.13	-0.760	11.934***	0.734	0.608	0.766
C8	I will accept and appreciate diverse cultural activities, such as different ethnic groups, beliefs, etc.	4.12	-0.635	10.084***	0.743	0.688	0.773
C9	I will try to find good aspects of bad things.	4.08	-0.982	10.412***	0.673	0.516	0.709
C10	When I contact beautiful things, it can stimulate my vitality and hope.	4.11	-1.118	10.221***	0.712	0.573	0.743

Table 3.16 Analysis of the aesthetic experience scale items (continued)

N of Q	Items	Average	Skewedness	(CR)	Corrected Correlation	Commonality	Factor load
C11	When I encounter difficulties or setbacks, I will appreciate it with a positive attitude.	4.06	-0.917	10.502***	0.714	0.594	0.743
C12	I can see the details of things that are easy to be ignored by others.	4.12	-0.835	11.674***	0.679	0.662	0.708
C13	I can see the details of beautiful things that are easy to be ignored by others.	4.08	-0.845	11.348***	0.702	0.671	0.729
C14	I can analyze the styles of beautiful things.	3.99	-0.764	11.463***	0.662	0.678	0.692
C15	I can understand the concept to be expressed by beautiful things.	4.00	-0.702	9.079***	0.643	0.707	0.674
C16	I can analyze reasons that make things beautiful.	4.02	-0.753	8.986***	0.633	0.715	0.665
C17	I will share and discuss things that I feel good with others.	4.12	-0.809	8.858***	0.703	0.620	0.736
C18	When I create works, I will unconsciously think of things that are related to them.	4.16	-0.776	11.233***	0.724	0.597	0.756
C19	When I create works, I will reminisce about the beautiful things that are related to them.	4.14	-1.083	11.022***	0.717	0.761	0.751
C20	When I create works, similar things I have seen before can suddenly flash through my mind.	4.09	-0.679	9.092***	0.723	0.787	0.758
C21	I will share my good experiences with others.	4.14	-0.959	9.477***	0.696	0.577	0.731

Note: CR: confirmatory reliability Sources: from this study

3.5.5.2 Aesthetic Experience Scale reliability analysis

Reliability analysis was conducted for the aesthetic experience scale. The Cronbach's α value for Aesthetic Pleasure is 0.900, the Cronbach's α value for the Attitude toward Aesthetics is 0.875, the Cronbach's α value for the Understanding of Aesthetics is 0.889, and the Cronbach's α value for Complete Experience is 0.883, with each dimension is in compliance with the standard(see Table 3.17).

Table 3.17 The reliability analysis summary table for aesthetic experience scale

Dimensions	N of Q	Average	SD	Corrected Correlation	Square complex correlation	Cronbach's α after item deletion	Dimensional Cronbach's α
Aesthetic Pleasure	C1	4.23	0.736	0.725	0.629	0.883	0.900
	C2	4.25	0.696	0.718	0.628	0.885	
	C3	4.07	0.774	0.682	0.476	0.891	
	C4	4.28	0.697	0.789	0.657	0.874	
	C5	4.15	0.759	0.738	0.574	0.882	
	C6	4.24	0.705	0.729	0.583	0.883	
Attitude toward Aesthetics	C7	4.13	0.726	0.707	0.539	0.848	0.875
	C8	4.12	0.687	0.712	0.537	0.848	
	C9	4.08	0.802	0.719	0.520	0.846	
	C10	4.11	0.729	0.722	0.532	0.845	
	C11	4.06	0.745	0.668	0.466	0.858	
Understanding of Aesthetics	C12	4.12	0.721	0.727	0.605	0.866	0.889
	C13	4.08	0.754	0.743	0.620	0.863	
	C14	3.99	0.800	0.721	0.525	0.868	
	C15	4.00	0.734	0.731	0.576	0.865	
	C16	4.02	0.750	0.734	0.570	0.865	
Complete Experience	C17	4.12	0.695	0.682	0.475	0.866	0.883
	C18	4.16	0.691	0.654	0.463	0.873	
	C19	4.14	0.705	0.791	0.651	0.841	
	C20	4.09	0.692	0.798	0.652	0.839	
	C21	4.14	0.717	0.673	0.478	0.869	
总体Cronbach's α			0.949				

Sources: from this study

3.5.5.3 Aesthetic experience scale confirmatory factor analysis

In the basic degree of fit, the measurement error of this scale is between 0.407 and 0.538, and there is no negative error variation, both reaching a significant level of 0.05. Additionally, the factor load is between 0.68 and 0.77. Therefore, the basic scale of the model is roughly in line with the fit criteria. In addition, the χ^2 value of this scale is 678.651, reaching a significant level, while the RMSEA value is 0.057. Although it is greater than the strict standard of 0.05, the P value is still less than 0.00, indicating that the theoretical model and the observed data still have a good fit. The GFI is 0.928, the AGFI is 0.909, and the NFI, CFI, and IFI are 0.931, 0.949, and 0.949, respectively. The scale is tested in terms of overall fit, and the results show that the fit of the theoretical model to the observed data is quite good.

In terms of the internal structural degree of fit of the model and the composition reliability of the potential variable, the Aesthetic Pleasure is 0.880, the Attitude toward Aesthetic, 0.845, the Understanding of Aesthetics, 0.865 and the Complete Experience, 0.836, all of which are above 60. standard. The average variabilities for the Aesthetic Pleasure, the Attitude toward Aesthetics, the Understanding of Aesthetics, and the Complete Experience are 0.551, 0.522, 0.536, and 0.504, respectively, all of which meet the evaluation criteria of 0.50 or higher. The results show that the fit of this scale is quite good, which has good reliability and validity. The confirmatory factor analysis and model fitting index table of the scale are shown in Table 3.18 and Table 3.19, and the results of the confirmatory factor analysis model are shown in Figure 3.5.

Table 3.18 Summary table of confirmatory factor analysis of aesthetic experience scale

Dimensions	N of Q	Factor Load	Std Error	Confirmatory Reliability (CR)	AVE
Aesthetic Pleasure	C1	0.760	0.422	0.880	0.551
	C2	0.710	0.496		
	C3	0.700	0.510		
	C4	0.760	0.422		
	C5	0.770	0.407		
	C6	0.750	0.438		
Attitude toward Aesthetics	C7	0.692	0.524	0.845	0.522
	C8	0.751	0.438		
	C9	0.733	0.467		
	C10	0.722	0.482		
	C11	0.721	0.482		
Understanding of Aesthetics	C12	0.722	0.482	0.865	0.563
	C13	0.773	0.407		
	C14	0.774	0.407		
	C15	0.741	0.452		
	C16	0.752	0.438		
Complete Experience	C17	0.700	0.510	0.836	0.504
	C18	0.710	0.496		
	C19	0.731	0.467		
	C20	0.732	0.467		
	C21	0.682	0.538		

Sources: from this study

Table 3.19 Aesthetic experience scale model fitting index table

Model	χ^2 value (p)	χ^2/df	RMSEA	GFI	AGFI	NFI	IFI	CFI
Aesthetic Experience	678.651***	3.708	0.057	0.928	0.909	0.931	0.949	0.949

Note: N=822 Sources: from this study

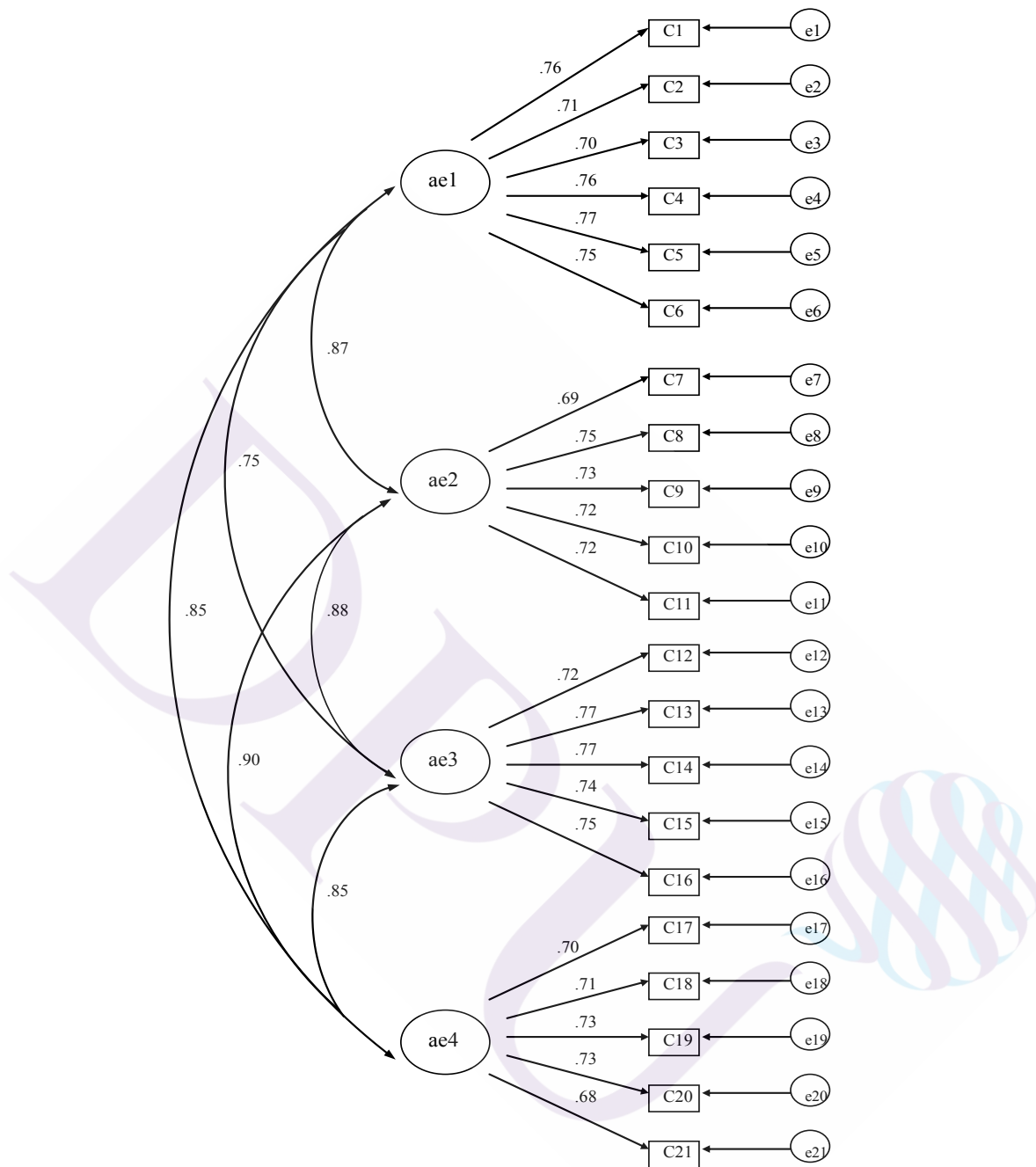


Figure 3.5 Aesthetic experience verification factor analysis model

Note: ae1: Aesthetic pleasure, ae2: Attitude toward aesthetics,

ae3: Understanding of aesthetics, ae4: Complete experience, C1-C21: Relevant items

3.5.5.4 Discriminant validity

This study will apply Chi-square difference test to detect the discriminant validity. Firstly, it will allow the correlation coefficient between any two factors in the model to be freely estimated (the correlation coefficient is not equal to 1). In so doing, it will get the model of unconstrained chi-square value. Secondly, comparatively, it will set the correlation coefficient between the two factors at 1 to get the restricted model of chi-square value. When the difference of chi-square value ($\Delta\chi^2$) between them exceeds $\chi^2_{1,0.05}=3.84$, it means that the nihil hypothesis ($H_0 : \rho = 1$) is wrong. That is to say, the acceptance factors are not completely correlated, rather, the two factors are different ($H_0: \rho \neq 1$). The result of this analysis, as shown in Table 3.21, proves that the Chi-square difference of any two factors in the restricted and unrestricted modes is higher than 3.84, both of which have achieved a significant level. This indicates that there are differences among the factors; namely, the scale has differential validities. For instance, Table 3.20 is a summary of restricted patterns of potential variable, and Table 3.21 is a summary of the validity of differences among potential variables.

Table 3.20 Summary of restricted patterns of potential variable

Model	χ^2/df	RMR	GFI	AGFI	NFI	CFI	RMSEA
Default model	3.708	0.022	0.928	0.909	0.931	0.949	0.057
ae1 vs ae2	4.544	0.026	0.909	0.885	0.915	0.932	0.066
ae1 vs ae3	6.222	0.032	0.862	0.826	0.884	0.900	0.080
ae1 vs ae4	4.647	0.026	0.907	0.883	0.913	0.930	0.067
ae2 vs ae3	4.319	0.024	0.914	0.892	0.919	0.937	0.064
ae2 vs ae4	4.048	0.023	0.921	0.901	0.924	0.942	0.061
ae3 vs ae4	4.528	0.025	0.910	0.887	0.915	0.933	0.066

Sources: from this study

Table 3.21 Summary of the validity of differences among potential variables

Dimensions	Restricted model ($\phi_{ij}=1$)		Standard Model (ϕ_{ij} =free)		$\Delta\chi^2$
	χ^2	df	χ^2	χ^2	
ae1 vs ae2	836.030***	184	678.651***	ae1 vs ae2	836.030***
ae1 vs ae3	1144.835***	184	678.651***	ae1 vs ae3	1144.835***
ae1 vs ae4	854.973***	184	678.651***	ae1 vs ae4	854.973***
ae2 vs ae3	794.644***	184	678.651***	ae2 vs ae3	794.644***
ae2 vs ae4	744.745***	184	678.651***	ae2 vs ae4	744.745***
ae3 vs ae4	833.090***	184	678.651***	ae3 vs ae4	833.090***

Sources: from this study

3.6 Analysis methods for data collected

3.6.1 Descriptive statistical analysis

Descriptive statistical analysis is used to describe the gender, age, working years, academic qualifications, positions, etc. in the questionnaires of this study. The purpose is to understand the composition of all the samples, and to explain and analyze the research contents and conclusions afterwards. The mean and variance of the scale are analyzed to understand the degree of concentration of the sample data.

3.6.2 Reliability analysis

Reliability is the degree to which the measurement of the constructive item is consistent or stable. In this study, Cronbach's α is used to detect the reliability of the items, and the Cronbach's α coefficient proposed by Nunnally (1978) is greater than 0.7, indicating that the internal consistency of the item is high and reliable. Statistical analysis of this study was performed using SPSS 22.0 software.

3.6.3 Validity analysis

Validity refers to the degree of validity of the constructive item, that is, the degree to which the construct is to be measured. Confirmatory Factor Analysis (CFA) verifies the content of the convergent validity and the goodness of fit of the measurement model in the research framework.

3.6.4 t-test

t-test is also known as the Student's t-test; it is mainly used for a normal distribution with a small sample content (for example, $n < 30$), with an overall standard deviation σ unknown. The t-test uses the t-distribution theory to infer the probability of occurrence of the difference, thereby comparing whether the difference between the two means is significant. Researcher of this study uses the scale to check

the [normal] (intermediate value) 3 points multiplied by the number of questions as the specified index value, and analyzes whether the university teachers' savoring, individual creativity and organizational innovation atmosphere perception are above the median value through a single sample.

3.6.5 Common method variation test

This study uses the Harman single factor test to test whether there is a common method variation. The basic assumption of the Harman one-factor test is that if the common method variation exists, two factors may occur in the factor analysis: (1) Only a single factor is extracted; (2) A common factor explains most of the variation. Harman's one-factor test is to perform exploratory factor analysis on all items in the scale and to test the results of non-rotating factor analysis to determine the minimum number of factors. If only one factor is extracted or the explanatory power of a factor is particularly large, it can be determined that there is a serious common method variation. If a factor accounts for more than 50% of the variance for all variables, then it is considered to have a severe common method variation (Podsakoff, Mackenzie, & Lee).

The scale in this study has 4 variables totaling 44 questions, and the Harman single factor test method is used. The results of the unrotated factor analysis in the exploratory factor analysis are used to extract 8 factors, of which the maximum explanatory power is 47.087%, which is less than 50%, so there is no serious common method variation in this scale.

3.6.6 Structural equation modeling

Structural equation modeling (SEM) is a multivariate statistical technique that combines factor analysis and path analysis. Its advantage lies in the quantitative study of the interaction between multiple variables.

CHAPTER 4

RESULTS

In this chapter, collected questionnaires are used to verify and analyze research hypotheses in order to understand whether each hypothesis holds, and finally research findings are discussed to understand the reason why a hypothesis holds or not.

Data analysis and verification are conducted for the proposed research hypotheses, including common method variance verification and correlation analysis of variables. A structural equation model is used to analyze the path and research model of each variable.

4.1 Variance analysis results

An independent sample t-test and one-way analysis of variance (ANOVA) are implemented based on the gender, teacher savoring, creative self-efficacy, aesthetic experience, and innovative behavior of individual background variables.

4.1.1 Gender

An independent samples t-test is carried out in the aspect of gender. Results show that differences between teachers of different genders in creative self-efficacy ($t = -0.237, p > 0.05$) and innovative behaviors ($t = -0.009, p > 0.05$) don't reach significant levels, so different genders have no significant differences in the two variables. However, they have significant differences in savoring ($t = -2.221, p < 0.05$) and aesthetic experience ($t = -2.226, p < 0.05$). Scores of female teachers are higher

than those of male teachers, so savoring and aesthetic experience of female teachers are higher than those of male teachers. Analysis results are listed in the following Table 4.1.

Table 4.1 Summary table of teachers' (different genders) participation in the independent variable t-test

Variable	Gender	N	Mean score	Standard deviation	t value
Savoring	Male	411	3.9949	0.65604	-2.221*
	Female	411	4.0873	0.53079	
Creative self-efficacy	Male	411	3.9141	0.70744	-0.237
	Female	411	3.9253	0.63436	
Aesthetic experience	Male	411	4.0000	0.63715	-2.226*
	Female	411	4.0906	0.52426	
Innovative behavior	Male	411	4.0146	0.68565	0.009
	Female	411	4.0142	0.61585	

Note: * $p < 0.05$.

4.1.2 Teaching seniority

Results in the aspect of teaching ages show that teachers of different teaching ages have significant differences in savoring ($F = 3.340$, $p < 0.05$), and through the post hoc comparative analysis, savoring of teachers of below 5 teaching years is higher than that of those of 16-20 teaching years. Teachers of different seniority have no significant differences in creative self-efficacy ($F = 1.580$, $p > 0.05$), aesthetic experience ($F = 1.183$, $p > 0.05$) or innovative behaviors ($F = 1.133$, $p > 0.05$). Analysis results are shown in the following Table 4.2:

Table 4.2 Summary table of teachers' (different genders) participation in the independent variable ANOVA

Variable		Quadratic sum	df	Mean square	F	<i>p</i>	Post hoc analysis
Savoring	Between group	4.726	4	1.182	3.340	0.010	Teachers of below 5 teaching years >
	Within group	289.004	817	0.354			
	Total	293.730	821				
Creative self-efficacy	Between group	2.841	4	0.710	1.580	0.178	Those of 16-20 teaching years
	Within group	367.369	817	0.450			
	Total	370.211	821				
Aesthetic experience	Between group	1.617	4	0.404	1.183	0.317	
	Within group	279.204	817	0.342			
	Total	280.821	821				
Innovative behavior	Between group	1.921	4	0.480	1.133	0.340	
	Within group	346.326	817	0.424			
	Total	348.246	821				

4.2 Correlation analysis results of variables

Table 4.3 lists the mean score, standard deviation, and correlation coefficient of variables. Correlation coefficients between variables are between 0.604 and 0.799, and correlations between different dimensions all reach significant levels ($p < 0.01$). Mean scores of variables are between 3.9197 and 4.1257, being at the middle and upper level. Table 4.3 shows the mean score, standard deviation, and correlation coefficient of variables. Mean scores of different dimensions of savoring are higher than 4, indicating that their savoring is all good. Mean scores in aesthetic

experience are all higher than 4 except for aesthetic understanding ($M = 3.9603$), meaning that teachers consider themselves with good aesthetic experience. Mean scores of both creative self-efficacy and innovative behaviors are between 3.9 and 4.02, meaning that creative self-efficacy beliefs and innovative behaviors of teachers both belong to the medium level.

Table 4.3 The mean score, standard deviation, and correlation coefficient of variables

Variable	1	2	3	4	5	6	7	8	9	10
1.Imagined Happiness	1									
2.Pleasant experience	0.733**	1								
3.Aesthetic Pleasure	0.638**	0.637**	1							
4.Attitude toward Aesthetics	0.624**	0.663**	0.744**	1						
5.Understanding of Aesthetics	0.591**	0.674**	0.661**	0.753**	1					
6.Complete Experience	0.643**	0.650**	0.728**	0.760**	0.727**	1				
7.Savoring	0.925**	0.937**	0.685**	0.692**	0.681**	0.695**	1			
8.Aesthetic Experience	0.700**	0.735**	0.887**	0.910**	0.879**	0.893**	0.771**	1		
9.Creative Self-Efficacy	0.644**	0.739**	0.656**	0.696**	0.733**	0.692**	0.745**	0.777**	1	
10.Innovative Behavior	0.604**	0.630**	0.663**	0.709**	0.735**	0.755**	0.663**	0.799**	0.714**	1
Mean Score	4.050	4.032	4.126	4.028	3.960	4.051	4.041	4.045	3.920	4.014
Standard Deviation	0.616	0.669	0.645	0.663	0.698	0.620	0.598	0.585	0.672	0.651

Note: ** $P < 0.01$ N=822

4.3 Analysis results of structural equation modelling

4.3.1 Overall model fit measures

As recommended by Hu and Bentler (1999), SEM overall model fitting is used in this paper for analysis. χ^2 value of the model reaches 2556.919, reaching a significant level. GFI = 0.877, AGFI = 0.863, NFI = 0.885, TLI = 0.917, CFI = 0.922, IFI = 0.922, RFI = 0.878, and RMR = 0.024, some indicators are slightly smaller than ideal values (Byrne, 2010). Moreover, Hair, Black, Babin, Anderson, and Tatham (2006) point out that incremental fit indexes NFI, RFI, IFI, TLI, and CFI \geq 0.8, and RMR \leq 0.05, thus satisfying structural effectiveness of the model. This indicates that this model has reasonable fitness (MacCallum, Browne, & Sugawara, 1996) (Table 4.4).

Table 4.4 SEM overall model fit measures

Measurement type	Measure	Cut-off for good fit	Results
Absolute fit measure index	χ^2/df	< 3	2.873(2556.919/890)
	GFI	> 0.9	0.876
	AGFI	> 0.8	0.863
	RMSEA	< 0.05	0.048
Incremental fit index	NFI	> 0.8	0.885
	TLI	> 0.8	0.917
	CFI	> 0.8	0.922
	IFI	> 0.8	0.922
	RFI	> 0.8	0.878
	RMR	<0.05	0.024

Sources: Hair, Black, Babin, Anderson and Tatham (2006)

4.3.2 Effect of savoring, creative self-efficacy, and aesthetic experience on innovative behaviors

In Table 4.5, structural coefficients of savoring, creative self-efficacy, and aesthetic experience for innovative behaviors all have statistical significance ($p < 0.05$), meaning that these factors have a direct bearing on innovative behaviors. Standardization coefficients are -0.141, 0.208, and 0.841, indicating that both creative self-efficacy and aesthetic experience have significant positive effects on innovative behaviors, but savoring has no significant effect on innovative behaviors.

The effect of savoring on aesthetic experience is 0.868, ($p < 0.05$), and confidence interval [0.793, 0.926] doesn't contain 0. The effect of savoring on creative self-efficacy is 0.459, ($p < 0.05$), and confidence interval [0.252, 0.648] doesn't contain 0. This means that savoring generates a positive effect on aesthetic experience and creative self-efficacy. However, the effect of savoring on innovative behaviors is -0.141, ($p = 0.054$, which is greater than 0.05), and confidence interval [-0.374, 0.022] contains 0, meaning that savoring has no effect on generation of innovative behaviors. The effect of aesthetic experience on innovative behaviors is 0.463, ($p < 0.05$), and confidence interval [0.272, 0.655] doesn't contain 0, indicating that aesthetic experience generates a positive effect on innovative behaviors. The effect of creative self-efficacy on innovative behaviors is 0.337, ($p < 0.05$) and confidence interval [0.021, 0.410] doesn't contain 0, indicating that creative self-efficacy generates a positive effect on innovative behaviors. The effect of aesthetic experience on creative self-efficacy is 0.463, ($p < 0.05$), and confidence interval [0.272, 0.655] doesn't contain 0, indicating that aesthetic experience generates a positive effect on creative self-efficacy. Therefore, hypotheses H3, H4, and H5 hold,

while H2 doesn't hold.

4.3.3 Mediation effect exerted by creative self-efficacy and aesthetic experience between savoring and innovative behaviors

In order to verify the mediation model (mediation effect exerted by creative self-efficacy and aesthetic experience between savoring and innovative behaviors), the Bootstrap method proposed by Shrout and Bolger (2002) is used in this paper. According to suggestions of Shrout and Bolger (2002), if 95% of confidence intervals of mediation effect acquired through re-sampling don't contain 0, then the mediation effect has statistical significance ($p < 0.05$).

It can be found from indirect effects in Table 4.5 that the total mediation of savoring on innovative behaviors through two mediating variables—creative self-efficacy and aesthetic experience—is 0.825, and confidence interval [0.758, 1.136] doesn't contain 0. This means that this effect has statistical significance ($p < 0.05$), and creative self-efficacy and aesthetic experience have the mediation effect. The mediation effect exerted by creative self-efficacy between savoring and innovative behaviors is 0.730 ($0.868 * 0.841$). The mediation effect exerted by aesthetic experience between savoring and innovative behaviors is 0.095 ($0.459 * 0.208$). The total effect is 0.684 ($-0.141 + 0.730 + 0.095$), and confidence interval [0.685, 0.837] doesn't contain 0. This means that the effect has statistical significance, and creative self-efficacy and aesthetic experience can exert partial mediation between savoring and innovative behaviors (Table 4.5 and Figure 4.1).

Table 4.5 Bootstrap SEM analysis of total, direct, and indirect effects

Effect	Estimate	p value	Confidence Interval
Direct effect			
TA-AE	0.868	0.001	[0.793, 0.926]
TA-SE	0.459	0.000	[0.252, 0.648]
TA-IB	-0.141	0.054	[-0.374, 0.022]
AE-IB	0.841	0.000	[0.661, 1.066]
AE-SE	0.463	0.000	[0.272, 0.655]
SE-IB	0.208	0.001	[0.021, 0.410]
Indirect effect			
TA-IB	0.825	0.001	[0.758, 1.136]
TA-AE-IB	0.730		
TA-SE-IB	0.095		
Total effect			
TA-IB	0.684	0.000	[0.685, 0.837]

Note: TA: Savoring; AE: Aesthetic Experience; SE: Creative Self-Efficacy; IB: Innovative Behavior

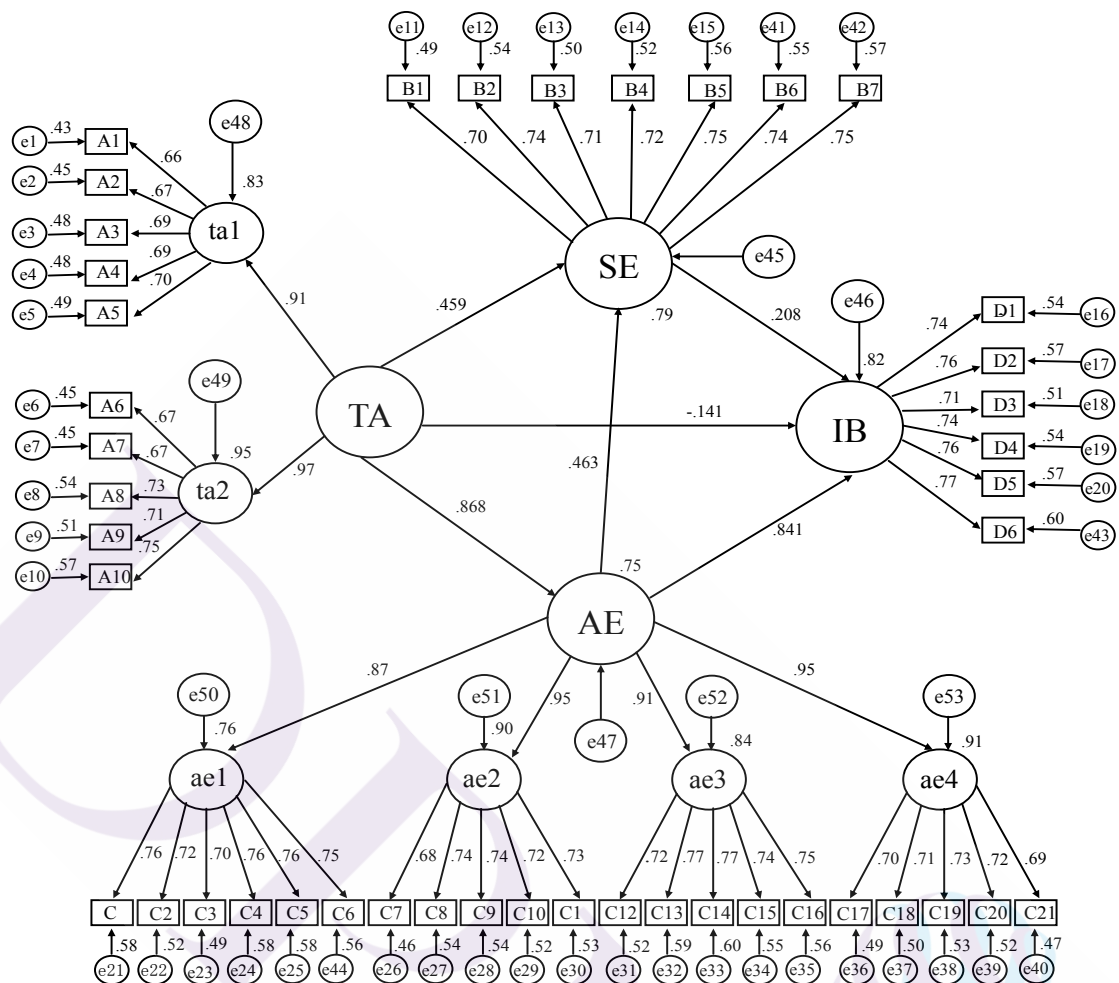


Figure 4.1 SEM overall model

(Note: TA: Savoring; AE: Aesthetic experience; SE: Creative self-efficacy; IB: Innovative behavior. ta1: Imagined happiness; ta2: Pleasant experience; ae1: Aesthetic pleasure; ae2: Attitude toward aesthetics; ae3: Understanding of aesthetics; ae4: Complete experience. A1-A10: Savoring for relevant items; B1-B7: Creative self-efficacy for relevant items; C1-C21: Aesthetic experience for relevant items; D1-D6: Innovative behavior for relevant items.)

Sources: Bryant and Veroff (2007); Chang, Wang and Li (2015); Lin (2009); Hong (2004)

CHAPTER 5

DISCUSSIONS

5.1 Introduction

This study surveyed university teachers in Shandong Province, China and 822 valid samples were collected. In terms of gender, there are 411 male university teachers and 411 female teachers. In terms of educational background, 408 of the teachers have a master degree, accounting for the largest number of the participants, and eight of them hold an associate or below degree, occupying the smallest percentage of the participants. With regard to ages, 270 of the teachers were between 36-45 years old, constituting the largest age group. 356 of the teachers have less than five years of teaching career, making up the large group of teachers. In terms of marital status, 561 of them are married, comprising the large group of participants. Finally, 377 of them are assistant professors, accounting for the biggest percentage of those who have earned their academic titleship, followed by 240 of them who are associate professors.

In order to verify research objectives and validate research hypothesis, this study uses SEM to explore the effects of university teachers' savoring, creative self-efficacy and aesthetic experience on their innovative behaviors.

5.2 Findings and Discussion

5.2.1 Differences between university teachers of different backgrounds in the effect of their savoring on innovative behaviors

Results in the aspect of gender show that teachers of different genders have no significant differences in creative self-efficacy and innovative behaviors. However, they have significant differences in savoring ($t = -2.221$, $p < 0.05$) and aesthetic experience ($t = -2.226$, $p < 0.05$). Scores of female teachers are higher than those of male teachers, which means that savoring and aesthetic experience of female teachers are higher than those of male teachers. Results in the aspect of teaching ages show that teachers of different teaching age have significant differences in savoring ($F = 3.340$, $p < 0.05$), and through the post hoc comparative analysis, savoring of teachers of below 5 teaching years is higher than that of those of 16-20 teaching years. This is identical with research findings of Byant (2003) and Hall (1984) and it may be related to their differences in opinions over positive events and the methods adopted. Compared with males, females are more inclined to expressing themselves when facing a positive event (Diener, 1984), and they are good at using languages and gestures to share their own positive experience, so scores of female teachers in the dimension—happy experience—are significantly higher than those of males. In the meantime, female teachers tend to recall their past happy time and enhance their experience of the past positive events through diary, photo, etc., so scores of female teachers in the dimension—Imagined Happiness—are significantly higher than those of males. Hence, Hypothesis.1 "university teachers of different genders have significant differences in creative self-efficacy and innovative behaviors" was not validated, while the hypothesis "university teachers of different genders have significant differences in savoring and aesthetic experience" has been validated.

Results in the aspect of teaching ages show that teachers of different teaching ages have significant differences in savoring ($F=3.340$, $p<0.05$), and through

the post hoc comparative analysis, savoring of teachers of below 5 teaching years is higher than that of those of 16-20 teaching years. But teachers of different teaching ages are not significantly different in creative self-efficacy ($F = 1.580, p > 0.05$), aesthetic experience ($F = 1.183, p > 0.05$) and innovative behaviors ($F = 1.133, p > 0.05$). This means that savoring of Chinese university teachers is influenced by their teaching ages. This is because for university teachers of shorter teaching years, the university has no strict requirements for teaching experience or scientific research, and they are featured by low pressure, relatively free and open time, high positive emotions, and easy satisfaction. But for teachers of more than 16 teaching years, they suffer from high pressure due to teaching requirements, scientific research or high economic pressure. Tension and negative feelings brought by pressure make them feel fatigued more easily, and their positive emotions are excessively depressed so that their savoring is partially low. The fact that people can "cope" with life pressure doesn't mean they can "savor" their life. Living through a plight doesn't mean the enhanced sense of happiness (Guo, et al., 2013). Therefore, savoring of Chinese university teachers is influenced by their teaching ages. However, scientific research and economic pressure in the university are the main factors determining their savoring. Nevertheless, university teachers have no significant differences in creative self-efficacy, aesthetic experience, and innovative behaviors. This means that university teachers are influenced by teaching ages, which means that the longer the teaching ages are, the less significant the innovative behavior is. University teachers of 16-20 teaching years are backbone teachers in the university. On the one hand, they suffer a lot from coping with severe teaching and scientific research pressure, and their positive emotions are excessively depressed. On the other hand, as they lack

objectives of further self-improvement or it's difficult to realize their dreams in the self-set goal, they have no motivation to actively challenge themselves and it's hard for them to think calmly. Therefore, their savoring can't be easily embodied by creative self-efficacy or even innovative behaviors.

Hence, H1.2 "university teachers of different teaching ages have significant differences in savoring" was validated, while the hypothesis "university teachers of different teaching ages have significant differences in creative self-efficacy, aesthetic experience, and innovative behaviors" has not been validated.

5.2.2 Effect of savoring of university teachers on innovative behaviors

The findings of this research show that savoring of university teachers has no significant effect on innovative behaviors (standardization coefficient is -0.141, $p < 0.05$). This research finding is different from research results of Lee and Jeng (2014), and Chiu (2009). Firstly, from the definition of savoring, people will take four control actions when perceiving an event, where those related to negative results include "avoid" and "cope", and those related to positive results include "obtain" and "savor" (Bryant, 1989). Under a positive event, "obtain" is the primary action and "savor" is the secondary action. Bryant (1989) is the first researcher who discusses the concept of "coping" and "coping" mentioned by Lazarus (1993), which refers to significantly and proactively coping with the negative event. Savoring, which is contrary to "coping", refers to the fact that an individual proactively seeks for, perceives, and enhances the happy experience brought about by positive events. In recent years, as Chinese universities have many requirements for and restrictions on innovation of university teachers, teachers will mostly take "adapt" and "avoid" actions towards their own resources, that's "coping". Consequently, teachers, though

equipped with certain degrees of savoring, are not willing to participate in innovative activities stipulated by the university, and this is one of reasons why savoring of university teachers has no effect on innovative behaviors.

Secondly, from the perspective of ideal basis for savoring generation, university teachers have high teaching and scientific research pressure but lack ideal conditions for savoring generation in order to "be released from pressure" (Bryant & Veroff, 2007). As Chinese universities have definite restrictions on and requirements for such teaching and scientific research that involves arduous and heavy tasks, and teachers' wages and benefits are under a low level, causing their pressure to be unimaginably high. Teachers have never been released from teaching and scientific research pressure and living pressure, so the effect of their savoring on innovative behaviors can't be truly embodied. Those teachers who want to "obtain" (Bryant, 1989), on the contrary, can better promote the occurrence of their innovative behaviors.

Thirdly, the complicated social context will influence individual differences (Johnson, Johnson, & Heimberg, 1999). In the fierce social competition environment, teachers feel higher and higher pressure and they can be more easily fatigued due to tension and negative feelings brought about by pressure. Emotions or feelings are significantly related to the employee's innovative behaviors. Savoring is an indicator moderating positive emotions (Nelson & Simmons, 2003; Simmons, 2002). Zeng (2011) finds that the employee's negative emotions would impede their innovative behaviors.

Fourthly, the conformity and accordance with social expectations, etc. are also factors that can exert an effect. Chiu (2009) points out that under a

highly-cohesive climate, employees take delight in having a consistent decision. Especially under China's cultural background, the conformity with others and compliance with team standards are regarded as necessary behaviors. Under such circumstances, savoring doesn't have the predicted effect on innovative behaviors. Similarly, under the influence of conformity and accordance with social expectations, etc., individual innovative behaviors can't stand out, and savoring of university teachers has no effect on innovative behaviors. Thus, hypothesis H2 was not validated.

5.2.3 Effect of savoring of university teachers on creative self-efficacy

According to our findings, the effect of savoring on creative self-efficacy is 0.459, ($p < 0.05$) and confidence interval [0.252, 0.648] doesn't contain 0, indicating that savoring has a positive effect on creative self-efficacy. This finding is similar to the previous research results (Tierney & Farmer, 2004; Chen, 1998; Lin, 2013).

Research results show that if a teacher is imagining happiness, he/she can be easily moved by the past days, current time, and beautiful things in the future and flow into the happy experience of imagining or sharing. Even if the teacher is faced with a problem, his/her self-belief will be enhanced and he/she will also believe that he/she can figure out more solutions or those different from others. To mention savoring seems only encouraging people to enhancing their happiness when enjoying the experience, but this is not the case. On the contrary, savoring can further encourage people to realize life goals or significant happiness. On a certain basis, creative belief and confidence of teachers will be enhanced by realizing the process of experience with significant goals. The sense of achievement or satisfaction makes them feel happier, namely a savoring life.

The positive attitude of savoring life and work through study can promote individual happiness and motivate creativity (Gaggioli et al., 2015). Stressing savoring can not only enhance life satisfaction and happiness but also can reduce negative feelings (Seligman et al., 2006). Savoring will affect emotion and enhance happiness by virtue of individual cognition and feelings at the time of doing positive things (Hurley & Kwon, 2012; Jose, Lim, & Bryant, 2012). Therefore, highlighting savoring of university teachers can not only enhance their life satisfaction and happiness and reduce negative feelings but also promote individual happiness and motivate creativity. And this is where the Department of HR Management of a university should lay the emphasis. So Hypothesis H3 is validated.

5.2.4 Effect of savoring of university teachers on aesthetic experience

According to this research findings, the effect of savoring on aesthetic experience is 0.868, ($p < 0.05$) and confidence interval [0.793, 0.926] doesn't contain 0, indicating that savoring of university teachers has a positive effect on aesthetic experience. This means that savoring of university teachers can improve positive emotions and dedicated thinking and facilitate teachers' appreciation of beautiful things more and the obtainment of the sense of pleasure and happiness. The research result accords with the viewpoint that when fully engaged in an event, people will feel more aesthetic experience (Ferguson & Sheldon, 2013).

Therefore, improving savoring of university teachers can elevate their pleasant aesthetic sensation, aesthetic understanding, and complete experience. This means that improving savoring through savoring strategies can make university teachers appreciate beautiful things, and observe and understand the significance expressed by beautiful things more carefully so as to deepen their impression of

beautiful things, which then becomes potential experience connecting more stimuli and can enhance or prolong the enjoyment (Bryant, 1989). Within the category of savoring, teachers are different in their performance, but the association with innovative behaviors and the aesthetic experience brought by beautiful things becomes important factors transforming savoring into behavioral performance.

As one of moderation strategies for individual positive feelings, savoring presents high correlations with positive feelings of state and trait (Livingstone & Srivastava, 2012). The interaction with important people can substantially improve affectivity of savoring (Gable, et al., 2004). Sharing with others is a powerful strategy used to improve savoring. Because of this, people will enjoy the savoring process better and will accumulate aesthetic experience. Hence, hypothesis H4 is validated.

5.2.5 Effect of creative self-efficacy of university teachers on innovative behaviors

This research results show that the effect of creative self-efficacy on innovative behaviors is 0.337, ($p < 0.05$) and confidence interval [0.021, 0.410] doesn't contain 0, indicating that creative self-efficacy will generate a positive effect on innovative behaviors. This research result is identical with those of scholars like Hsu, Hou and Fan (2011), Robbins and Kegley (2010), and Tierney and Farmer (2002). This indicates that when a teacher is faced with a problem and believes that he/she can come up with solutions different from others or new solutions, he/she will have high innovative behaviors. When the teacher is confident in getting something done in a creative way, he/she will have high innovative behaviors. When thinking that he/she can complete objectives or tasks in different ways, this teacher will display certain innovative behaviors. In creative thinking, more attention should be paid to

ego-strength than cognitive skills (Runco, 2004). That is because creative efforts stimulate individual will to accept the challenge and bring about breakthrough-like creativity for working tasks by relying on the motivation of internal sustainable ego support (Amabile, 1983; Bandura, 1997), thus motivating individual creative performance.

Therefore, creative self-efficacy of university teachers is very important. Possibly, university teachers believe that it's very difficult to obtain creative ideas, so when they are faced with a problem and have confidence in new ideas or ideas different from others, they will have better performance in innovative behaviors. Therefore, importance must be attached to beliefs of university teachers in creative thinking. Hence, hypothesis H5 is validated.

5.2.6 Effect of aesthetic experience of university teachers on innovative behaviors

The results of this study show that the effect of aesthetic experience on innovative behaviors is 0.841, ($p < 0.05$) and confidence interval [0.661, 1.066] doesn't contain 0, indicating that aesthetic experience of university teachers has a positive effect on innovative behaviors. This finding conforms to the viewpoints of Lin (2009), Chen (2013) and Chang (2017). According to research findings, "aesthetic pleasure", "aesthetic understanding", and "complete experience" in aesthetic experience will have great effects on teachers' innovative behaviors. If a teacher finds beautiful things proactively or unconsciously and has enjoyable feelings, the possibility of innovative behaviors will be high. If the teacher can understand meanings expressed by beautiful things, the possibility of innovative behaviors will be high. If the teacher discusses or shares beautiful things with others, he/she will

recall the past experience in related beautiful things when creating or being occupied in related work, and then the possibility of innovative behaviors will be high.

According to the flow theory proposed by Csikszentmihalyi (1999), when an individual shows deep interests in an activity or thing and feels about aesthetic experience, he/she can easily perform innovative behaviors. Therefore, interests of university teachers in appreciating beautiful things and their abilities to unconsciously be attracted by beautiful things should be improved, so that they can obtain a sense of pleasure and well-being when appreciating beautiful things and deepen their impressions of these things. Then, this becomes potential experience which can contribute to their future performance in innovative behaviors. The opportunities for university teachers to discuss and share with their colleagues or friends about beautiful things should be increased, so that they can obtain related experience in the sharing process. This will be conducive to the performance of their innovative behaviors. Therefore, all of the above experience can stimulate the development of teachers' innovative behaviors, and this is a point worthy of educational attention. Therefore, hypothesis H6 is validated.

5.2.7 Effect of aesthetic experience of university teachers on creative self-efficacy

The results of this study show that the effect of aesthetic experience on creative self-efficacy is 0.463, ($p < 0.05$), indicating that aesthetic experience of university teachers has a positive effect on creative self-efficacy. This result accords with the viewpoint proposed by the researchers (Bandura, 1994; Kear, 2000). If the teacher can accept plural ideas and seek aesthetic value from different or bad things and if his/her ability to perceive and analyze beautiful things becomes higher, he/she

will generate more new solutions and be more confident when facing a problem. The teacher can be easily unconsciously attracted by beautiful things, feel about pleasure or well-being, and can observe fine parts of beautiful things, with a stronger self-perception ability than others. Moreover, he/she can easily generate creative ideas.

If the teacher loves appreciating beautiful things and feels about pleasure and well-being when appreciating them, this will deepen his/her impressions of beautiful things and they will accumulate potential experience. These impressions and experiences will become the potential skills of the teacher. For this, the university should pay attention to teachers' aesthetic experience. Therefore, hypothesis H7 is validated.

5.2.8 Mediation effect exerted by creative self-efficacy of university teachers between their savoring and innovative behaviors

According to the results of this research, the mediation effect exerted by creative self-efficacy between savoring and innovative behaviors is 0.730, ($p < 0.05$), and savoring will exert a positive effect on innovative behaviors through creative self-efficacy. This result is similar to previous results (Chang, et al., 2015; Lin, 2013; Liang & Chang, 2014). If a teacher is imagining happiness, he/she can be easily moved by the past days, current time and beautiful things in the future, recall related things, and share beautiful things with others and engage in the happy experience. Even if the teacher is faced with a problem, he/she can figure out more solutions or those different from others. At the time, the teacher can make better innovative behaviors. Therefore, hypothesis H8 is validated.

Another result of this research shows that a teacher can generate a positive effect of savoring on innovative behaviors only on the precondition of having creative self-efficacy. As any psychological change caused by a teacher's savoring is out of the goal of changing his/her own expectation of self-efficacy and promoting generation of creative thinking and behavioral performance, self-efficacy will mediate the relationship between the experience of individual cognition and behavioral performance (Bandura, 1986, 1997). As "savoring" and "obtaining" are positive cognitive capabilities related to internal self-perception, savor is significantly related to pleasure. Individuals can lengthen the time of pleasure and enhance positive emotional effects through "flowing" or "savoring" (Bryant & Veroff, 2007). In creative thinking, more attention should be paid to ego-strength than cognitive skills (Runco, 2004). That is because creative efforts stimulate individual will to accept the challenge and bring about breakthrough-like creativity for working tasks by relying on the motivation of internal sustainable ego support (Amabile, 1983; Bandura, 1997), thus motivating individual creative performance.

Therefore, university students should improve their creative self-efficacy in order to promote the effect of savoring on innovative behaviors. Based on this research's results, teachers' savoring has a negative effect on innovative behaviors, but after creative self-efficacy mediation is added, savoring can exert a positive effect on innovative behaviors through creative self-efficacy. Thus, for the present university teachers in China, if teachers' savoring is used to improve innovative behaviors, this can be significant only when teachers have creative self-efficacy.

5.2.9 Mediation effect exerted by aesthetic experience of university teachers on the relationship between savoring and innovative behaviors

According to this research results, the mediation effect exerted by aesthetic experience between savoring and innovative behaviors is 0.095, ($p < 0.05$), which means savoring will positively influence innovative behaviors through aesthetic experience. This indicates that if a teacher loves beautiful things likes recalling, enjoys life (Bryant & Veroff, 2007), and accepts different cultures and ideas, he/she can obtain experience from the experiencing process. Moreover, he/she can recall some previous beautiful experience and things and generate feelings like pleasure by integrating all kinds of stimuli and messages. In addition, he/she can absorb and internalize aesthetic feelings externally observed during the contemplative process of individual experience. Such aesthetic experience becomes potential energy for initiating creativity and promotes the occurrence of innovative behaviors after subconscious and conscious combination. This also means that a teacher can enhance creative motivation and beliefs through his/her aesthetic experience like aesthetic attitude, aesthetic understanding, and complete experience in way of imagining happiness. In way of happy experience, a teacher can stimulate creative motivation and transform beliefs into creative performance through his/her aesthetic experience like aesthetic attitude, aesthetic understanding, and complete experience.

If a teacher generates a deep interest in beautiful things and triggers spiritual satisfaction or resonance through the contemplative process, his/her creative motivation can be stipulated, his/her creative beliefs can be enhanced, and the occurrence of innovative behaviors can be promoted. For instance, Hume mentioned in of Standard of Savoring that, beauty is not a property of the object itself but only exists in the heart of the perceiver. He proposes that "beauty doesn't exist in the thing itself but lies in a contemplative heart". When the aesthetic subject starts having

feelings about the aesthetic object, his/her heart is not blind emptiness but in a contemplative dialogue. Hence, aesthetic experience starts from the perception through sensual feelings that the aesthetic object affirms his/her own life and practice, thus generating spiritual satisfaction and joy. More and deeper essential contents can be felt and perceived through consciousness and representation. Lin (2009) also points out that aesthetic experience, as a kind of cognitive process, triggers positive mental feelings like exclaiming and pleasure due to novel things and abundant and rapidly-changing phenomena in the environment by using senses like visual sense and auditory sense. Furthermore, after subconscious and conscious combination, aesthetic experience will become potential energy for initiating innovative behaviors and may exert their effect on the next innovative behavior. Hence, hypothesis H9 is validated.

In addition, people's aesthetic experience will be improved by using some specific savoring strategies. For instance, certain memory building method can lengthen positive experience (Bryant, Yamold, & Morgan, 1991), and sharing with others contributes to building individual mental resources. When concentrating on listening to music within the positive category, people will savor more aesthetic experience (Ferguson & Sheldon, 2013). Aesthetic experience is namely an interaction process between cognition and emotions (Leder, Belke, Oeberst, & Augustin, 2004). The variable—*aesthetic experience*—is introduced between savoring and innovative behaviors in this paper. Its mediation effect is discussed to provide a brand-new angle for teachers to improve their innovative behaviors, which will be of practical significance.

Therefore, colleges and universities should support, encourage or hold activities that teachers love and can be devoted to, and create an environment where

teachers will have positive feelings. This can enhance teachers' aesthetic experience and improve the effect of savoring on innovative behaviors.



CHAPTER 6

CONCLUSIONS

6.1 Theoretical Contribution

Savoring, creative self-efficacy, aesthetic experience, and innovative behaviors of university teachers were mainly discussed in this paper. Social cognition theory, creativity theory, and creative self-efficacy theory were taken as the theoretical foundation, and research hypotheses were put forward, followed by the data analysis to obtain important research results. Research results will be discussed in this chapter as the final conclusions, and research suggestions and practical suggestions will be proposed.

6.2 Research Conclusions

The discussion is conducted from ghd aspects of research objectives, research hypotheses, and to-be-answered questions, etc. Efforts are made to seek for reasons why research results are identical with or different from research inferences and hypotheses, and conclusions are drawn as follows:

6.2.1 University teachers of different genders show significant differences between savoring and aesthetic experience, so do teachers of different teaching ages

Through the statistical analysis, university teachers of different genders are not significantly different in creative self-efficacy or innovative behaviors. However, they have significant differences in savoring and aesthetic experience. Savoring of

female teachers is significantly higher than that of male teachers.

Faced with a positive event, males and females hold different opinions and use different methods (Guo, 2014). Females are more inclined to expressing themselves (Diener & Emmons, 1984), good at sharing their own positive experience with others using languages and gestures, and obtain happiness in the expression and sharing process. In the meantime, females are more likely to recall their past happy time and enhance their experience of the past positive events through diaries, photos, etc. They are often lost in thought when recalling happy time and obtain imagined happiness and past experience from this. Females can be more easily stimulated by beautiful things and are willing to participate in aesthetic experiences, which deepens their impressions on beautiful things. These impressions become potential experience and can enhance or lengthen pleasure (Bryant, 1989).

Teachers of different teaching ages have significant differences in savoring. University teachers of different teaching ages undertake different teaching and scientific research tasks. Teachers, who have taught for less than 5 years, are in an initial phase when they accumulate teaching and scientific research experience, and show great interests in many things with low teaching and scientific research pressure. Moreover, they are trying to accumulate their experience and obtain confidence. However, on the one hand, teachers, who have taught for 16-20 years, have to receive strict assessment of their teaching and scientific research by school authorities. On the other hand, they have to bear the family burden raising their children and taking care of their elderly parents simultaneously. Under high teaching and scientific research pressure and living pressure, ideal conditions for savoring generation are lost, and it's difficult for them to be "released from pressure" (Bryant & Veroff, 2007). Their

positive emotions are excessively depressed and their savoring is lower than teachers who have taught for less than 5 years. Restricted by the development space for teaching career, teachers' beliefs in self-set goals are hard to realize due to lack of motivation. Out of the consideration of improving school image, the university tends to arrange teachers to undertake arduous work unrelated to teaching or scientific research, so they lack the space for contemplating on innovative development. This is also the main reason why university teachers show no significant differences in creative self-efficacy, aesthetic experience, and innovative behaviors.

6.2.2 Savoring of university teachers has no significant effect on innovative behaviors

Based on the findings of this study, it is shown that savoring of university teachers has no significant effect on innovative behaviors. Firstly, as colleges and universities in China have stipulated many compulsive requirements for and assessments of innovation of their teachers, teachers proactively take actions of "adapting" and "avoiding", which is called "coping" (Bryant, 1989). This is also one of reasons why savoring of university teachers has no effect on innovative behaviors. Secondly, university teachers fail to be "released from pressure" under heavy teaching and scientific research pressure and living pressure (Bryant & Veroff, 2007). In other words, colleges and universities in China have enforced strict assessment requirements for teaching and scientific research activities of their teachers, while the teachers receiving unsatisfying wage and treatment, so their savoring can't be truly manifested. Those teachers who can manage to "obtain" (Bryant, 1989), on the contrary, can better promote the occurrence of innovative behaviors.

Thirdly, in an environment full of fierce social competition, teachers are occupied in part-time teaching or a second job besides completing their teaching and scientific research tasks in order to increase their incomes. Therefore, their rest and contemplation time will be occupied, and high-pressure results in increasing negative feelings, which will impede their innovative behaviors. Fourthly, according to the Chinese culture, the conformity with others and compliance with team standards are regarded as necessary behaviors (Chiu, 2009). Under the influence of conformity and accordance with social expectations, etc., the difference from others is regarded as breaking away from the group and teachers will feel left out. Under this circumstance, their innovative behaviors are hard to stand out, and their savoring has no significant influence.

6.2.3 Savoring of university students has a positive effect on creative self-efficacy

Based on research findings, savoring has a positive effect on creative self-efficacy. Research results indicate that teachers can be easily moved by beautiful things. Through imagined happy experience, their self-beliefs will be strengthened. Encountering a problem, they will firmly believe that they can find out more effective solutions or solutions different from others. When enjoying the happy experience, people are more willing to pursue significant happiness. Teachers' creative beliefs and confidence will be enhanced when they are realizing their aesthetic experience with significant objectives. Moreover, they can easily obtain a sense of achievement of satisfaction. The sense of achievement will make them feel happy, namely, delivering them a life of savoring.

The positive attitude of savoring life and work through study can promote individual well-being and motivate creativity (Gaggioli et al., 2015). Stressing savoring of university teachers can not only enhance life satisfaction and happiness and reduce negative feelings (Seligman et al., 2006) but also will enhance creative beliefs and confidence, promote individual well-being, and motivate creativity. Elevated savoring will facilitate teachers' pursuit of more significant senses of satisfaction so as to enhance creative beliefs, stimulate creative motivation, and create a beautiful life. And this is where the Department of HR Management of a university should lay the emphasis.

6.2.4 Savoring of university teachers has a positive effect on aesthetic experience

It's found through this research that savoring of university teachers has a positive effect on aesthetic experience. Specifically, savoring of university teachers can improve positive emotions, which can encourage teachers to love beautiful things and trigger their dedicated thinking. As a result, teachers will enjoy appreciating beautiful things more and obtain pleasure and happiness from this. Facing beautiful things, teachers will obtain pleasure through pleasant aesthetic sensation, aesthetic attitude, aesthetic understanding, and complete experience. Feeling pleasure, university teachers will observe and understand the significance expressed by beautiful things more carefully so as to deepen their impressions on beautiful things, which will become potential experience enhancing or prolonging the pleasure (Bryant, 1989).

Savoring of teachers shows differences in their behaviors, but the association with aesthetic experience becomes an important factor for savoring to be

transformed into behavioral performance. Savoring is highly correlated to state-like and trait-like positive feelings (Livingstone & Srivastava, 2012). The interaction with important people can substantially improve the emotional effect of savoring. Sharing with others is a powerful strategy used to improve savoring. Because of this, people will engage in the savoring process better and accumulate more aesthetic experience.

6.2.5 Creative self-efficacy of university teachers has a positive effect on innovative behaviors

Research results of this study show that creative self-efficacy will generate a positive effect on innovative behaviors. This means that when faced with a problem, teachers will have different solutions and confidence, and their performance in innovative behaviors will also be different. When being able to figure out new solutions, the teacher will have highly active innovative behaviors. When believing that he/she can complete a task in a creative way, he/she will have highly active innovative behaviors. When thinking that he/she can complete objectives or tasks in different ways, this teacher will have certain innovative behaviors. In creative thinking, more attention should be paid to ego-strength than cognitive skills (Runco, 2004). That is because creative efforts stimulate individual will to accept the challenge and bring about breakthrough-like creativity for working out tasks by relying on the motivation of internal sustainable ego support (Amabile, 1983; Bandura, 1997), thus motivating individual creative performance.

In the eyes of university teachers, the creative thinking ability is very important, possibly because they think that it's very difficult to obtain creative ideas. When encountering a problem and having confidence in new ideas or ideas different

from others, they will have better performance in innovative behaviors. Therefore, the emphasis should be laid on university teachers' creative thinking beliefs.

6.2.6 Aesthetic experience of university teachers has a positive effect on innovative behaviors

Based on this research results, aesthetic experience of university teachers has a positive effect on innovative behaviors. "Pleasant aesthetic sensation", "aesthetic attitude", and "complete experience" in aesthetic experience will generate great effects on teachers' innovative behaviors. When finding beautiful things, realizing meanings they express, discussing or sharing with others, and creating or being occupied in related work, teachers will recall the past experience of contacting related beautiful things, so their innovative behaviors will be improved.

According to the flow theory proposed by Csikszentmihalyi (1999), when an individual presents deep interests in an activity or thing and feels about an aesthetic experience, he/she can easily make innovative behaviors. If a teacher feels impressed when appreciating a beautiful thing, the beautiful thing has already left a deep impression, which becomes his/her own potential energy and boosts his/her confidence unconsciously. Therefore, when the teacher needs to perform innovative behaviors, the potential energy will be motivated, because of which he/she will be more confident in solving problems so as to promote the generation of innovative behaviors. If university teachers usually discuss and share beautiful things with their colleagues or friends, they can obtain related experience in the sharing process, which will be conducive to the performance of their innovative behaviors. Hence, the above experience can all contribute to the development of teachers' innovative behaviors, which is worthy of educational attention.

6.2.7 The positive impact on self-efficacy by university teachers' aesthetic experience

This research suggests that university teachers' aesthetic experience has a positive influence on creative self-efficacy. Confronted with the beautiful stuff, teachers have the ability to obtain the sense of happiness and experiences through gaining the pleasure of beauty, aesthetic attitude, their understanding of the beauty and the completed experience, all of which can strengthen the belief and confidence of problem-solving, stimulating different connections and triggering the potential energy.

Moreover, it is more tolerant for them to accept divergent cultures and different ideas and to notice the positive meanings from the negative things. Accordingly, they, in these processes, can gain various experiences, which largely increase their confidence of creative thinking. When teachers enjoy the beautiful stuff, they are more sensitive to the subtleties and are more confident in terms of creative thinking, resulting in a more receptive attitude toward others' different opinions.

6.2.8 The mediating effect of teachers' creative self-efficacy on the relationship between savoring and innovative behavior

Some research shows that savoring has a positive impact on innovation behavior through creative self-efficacy, which performs a partial mediating function. Being confronted with aesthetic experience, teachers are imagining happiness and pleasure while unconsciously associating them with other related things. Immersed in this pleasant experience, they can easily excogitate new approaches of addressing problems, inspiring their innovative behavior.

When teachers take creative self-efficacy as priority, their savoring will

show positive impact on innovative behavior. Any psychological changes caused by teachers' savoring are resulted from their purposes of altering their expectations of self-efficacy. In the process of promoting creative thinking and behavior performance, self-efficacy mediates the relationship between individual cognitive experience and behavior performance (Bandura, 1997). Bryant and Veroff (2007) propose that savoring is a capability of feeling positive emotions actively and intentionally, and the savoring and acquisition are a positive perception related to an internal self-perception. Thus, teachers can increase their beliefs and confidences in their creativity through their active and positive perception and experience of savoring. Consequently, their innovative behavior and performance can be significantly enhanced.

6.2.9 The mediated effect by the aesthetic experience of university teachers on the relationship between savoring and innovative behavior

The results of this study prove that savoring has positive influence on innovative behavior through aesthetic experience, which has a partial mediating effect. Teachers may also be fond of beautiful things, enjoying memories and life, and thus accept different cultures and ideas. Gaining aesthetic experiences enables teachers to recall some good experiences and things, and apply them to the innovative behavior. When they appreciate beautiful things, they can absorb and internalize their aesthetic sense observed from the outside into personal experiences. These experiences, combined with the subconscious and the conscious, turn to be the potential energy to unlock creativity and promote the occurrence of innovative behavior. Therefore, teachers can enhance creative motivation and beliefs and provoke creative performance by imagining happiness and pleasant experience, and by gaining aesthetic experience.

Therefore, universities and colleges should support, encourage and organize activities that teachers are interested in and would like to be involved in, so as to create a positive environment for teachers to augment teachers' aesthetic experience and to enhance the impact of savoring on innovative behavior.

6.3 Research Implication

The concept of savoring is proposed by Bryant (1989). Although many studies have discussed the influence of savoring over years, this topic has not fully been explored in China as a new subject, calling for more academic attention and research. This study aims to explore the correlation between university teachers' savoring and innovative behavior, which is different from results concluded by previous research (Wang, 2008; Yuan, 2008).

Therefore, the research on the conception of savoring has a high value of referencing and practicing in China. Along with more close attention paid to the studies of positive action and positive movements in recent years, this area has been further developed in depth. This study finds that university teachers' savoring has a positive impact on creative self-efficacy and aesthetic experience; thus it can provide referencing value when recruiting candidates. Specifically, through understanding the candidates' savoring, it can predict the possible performance of candidates' creative self-efficacy. Simultaneously, it is also a way of training them, enhancing their working performance by cultivating their savoring. Besides, according to the positive experience view of immersion theory, universities may also adopt corresponding politics—such as supporting, encouraging or organizing activities—that teachers are interested in and would like to get involved in so as to create an environment which

can provide them with positive feelings and experiences, enhance their savoring, raise their creative self-efficacy, and eventually promote their innovative behavior.

6.3.1 This study aims to fill some academic gaps and to make some academic contributions as followed:

First of all, savoring is based on the positive psychological discourse (Bryant & Veroff, 2007; Seligman, 2002). Self-efficacy and aesthetic experience are important factors to predict behavior performance. This study attempts to interconnect the two areas and explore the savoring mechanism of the creative process from creative self-efficacy and aesthetic experience to innovative behavior. This study argues that savoring has a positive effect on creative self-efficacy and aesthetic experience, but it has no significant effect on innovative behavior. There is another problem in this study: why does savoring have no effect on innovative behavior? This study believes that it is due to the compulsive requirements of innovation in Chinese universities and colleges at the present, which damages the meaning and function of savoring. Moreover, some negative emotions and conformity may also reduce its effect. However, more future research should be encouraged for this topic to explore more specific factors.

Secondly, it is more important that this paper confirms the intermediary meaning of creative self-efficacy and aesthetic experience in the influence of savoring on innovation behavior. It is an initial attempt to use aesthetic experience as an intermediary variable between savoring and innovative behavior. This attempt can highlight savoring implication of creativity theory and make some contributions to cultivating creative talents.

Thirdly, the positive influence of savoring on creative self-efficacy and aesthetic experience enriches the relevant research on this topic. University teachers should improve their creative self-efficacy and aesthetic experience in order to promote the influence of savoring on innovative behavior. Some research suggests that teachers' savoring actually has no effect on innovation behavior, but after combining the intermediary of creative self-efficacy and aesthetic experience, savoring has a positive impact on innovative behavior through creative self-efficacy or aesthetic experience. Therefore, given teachers who work in Chinese universities, more attention should be paid to improving their self-efficacy and aesthetic experiences in order to improve their innovative behavior.

6.3.2 This study provides educational implications for universities and relevant institutions to cultivate innovative talents.

Firstly, it is found that savoring has a positive impact on creative self-efficacy, which reinforces individual innovative behavior. Seligman (2011) proposes 'Happiness Theory' that encourages schools to introduce the concept of happiness that benefits students' studies. In doing so, not only can they increase the sense of life satisfaction, but also may help them learn and excise their creative thinking. Therefore, universities should strengthen the training for teachers, reinforcing their positive psychological experience and pursuit. In so doing, teachers can enhance their savoring, which will benefit their other work.

Secondly, some research finds that creative self-efficacy is an important intermediary mechanism between savoring and innovative behavior. Therefore, universities can design multiple ways to improve the flexibility of teaching environment, encourage teachers to think creatively, allow them to give suggestions

or queries, and help to increase academic communication and different arguments among teachers. In so doing, teachers' self-confidence can be consistently improved.

Thirdly, aesthetic experience is an important intermediary mechanism between savoring and innovative behavior. It is an efficient strategy to improve savoring, enabling people to better immerse themselves in the process of savoring and accumulate aesthetic experience. Aesthetic experience is a positive psychological feeling, such as the senses of amusement and pleasure, caused by novel phenomena through the usage of visual and auditory senses. Moreover, aesthetic experience will become a potential energy to initiate innovative behavior through the combination of the subconscious and the conscious, and play a role in the next innovative behavior (Lin, 2009). Therefore, universities need to establish a series of programs to implement innovative behavior, and cooperate with the teaching environment and equipment in order to effectively enhance teachers' innovative behavior. However, on the other hand, teachers' aesthetic experience will also affect their innovative behavior. Thus, they should further enhance their aesthetic experience so that they can have enough tolerance to consider and accept different ideas and give timely feedback, which can reinforce their appreciation of the beauty in a relaxed and pleasant manner. Accordingly, their impression and understanding of the beauty may be stronger and deeper. This aesthetic process and feelings may turn to be potential aesthetic experience. However, due to the strict management system of universities, the opportunities and space are limited for teachers to create immersive thinking. It may cause the adverse effects as some teachers may find it unacceptable and unadoptable. This is an urgent problem that we should pay more attention to in order to enhance teachers' aesthetic experience. We must improve teachers' management style and

create opportunities and space for teachers to have critical and free thinking. Teachers themselves need to adjust their positive emotions to help improve aesthetic experience and promote their innovative behavior.

Fourthly, aesthetic experience of university teachers has a positive impact on innovative behavior. This research proves that aesthetic experience has a positive impact on teachers' innovative behavior, particularly on the three aspects of 'aesthetic pleasure', 'aesthetic attitude' and 'complete experience'. That is to say, teachers are deeply impressed by the pleasure and emotions that they feel when they appreciate beautiful things. Through discussions with others and the meditating effect of the process, these experiences are consciously and subconsciously linked, so when teachers begin to perform innovative behavior, it is likely that they will unconsciously recall the relevant events of the past, which will stimulate the connection of various resources and help teachers to develop their innovative behavior. Therefore, universities should encourage or organize activities that teachers are fond of and can devote to, and create opportunities and space for teachers to think freely, as well as enhance teachers' savoring and aesthetic experience, and eventually promote their creative performance.

6.4 Educational Recommendations

Based on the conclusions above, some this study proposes some recommendations as followed:

6.4.1 Research on multiple encouraging approaches to improving university teachers' belief of creative thinking should be conducted in order to promote their innovative behavior

It is concluded that the beliefs of creative thinking are beneficial for the performance of innovative behavior. In the creative thinking, self-intensity should be given more attention to than that of cognitive skills. Universities can design various methods of encouragement, such as organizing some sections to improve teachers' identity with their professional development or self-confidence, promoting the flexibility of teaching environment, encouraging open suggestions or queries, increasing interactions of different opinions and communication among teachers, and encouraging them to think creatively and innovatively. In so doing, teachers' self-confidence would be enhanced and their psychological experiences may be positively strengthened. When they meet problems, they will have stronger will to accept challenges, and to bring breakthrough creativity for their jobs and to consistently stimulate their creative performance.

Based on the effect of creative self-efficacy on innovative behavior, it is clear that university teachers generally do a better job when they are confronted with problems as they are confident to find alternative or efficient solutions, which enable them to address the problems in an innovative manner. On the contrast, when teachers hold lower belief in themselves, their innovative behavior is less satisfying. Therefore, it is wise for universities to create various ways of reinforcing teachers' belief, promoting their innovative behavior.

6.4.2 Efforts should be made to enrich teachers' aesthetic experience through creating 'free-thinking' space and improving their concentration

This research finds that the three aspects—'pleasure to the beauty', 'aesthetic understanding' and 'complete experience'—have obvious and strong influence on teachers' innovative behavior. Simultaneously, it is found that

immersion and concentration can make them appreciate the beauty more, subtly observing and understanding the deeper meaning of beautiful things. The cognition may intensify their impression of the beauty, transforming it into potential experience, connecting more stimulation, and enhancing or prolonging the pleasure.

Generally, it is an efficient way to increase teachers' positive experience and level up their savoring to create a space in which they can freely think and to encourage or organize activities that teachers are interested in and are willing to devote to. This will provide them space to think and accept different ideas, and provide prompt feedback to the teachers. In this process, the teachers will enjoy the beauty and feel more relaxed in front of the beautiful things, which can further deepen their understandings of aesthetic experience and help them to obtain enriched experience, and eventually help them to turn the experience into their potential experience.

6.4.3 Promoting teachers' savoring: encourage them to share the positive experience

Some studies have found that it is a powerful strategy to share with others to immerse in the savoring process and to accumulate aesthetic experience. Teachers should be encouraged to share their pleasant experience by means of speech and body language in order to improve their savoring. Indeed, sharing is an effective way of enhancing their experience and improving the individual's better immersion in the process. In terms of savoring, the relationship with innovative behavior and aesthetic experience brought by the beauty is a crucial factor in the transformation from the savoring to behavior performances, even though these performances of each teacher are different. As savoring is closely correlated with positive emotions, the interaction

with important people can substantially improve the emotional effects of savoring.

6.4.4 Lectures and art activities should be held to enhance teachers' happy experience so as to promote their innovative behavior

This research suggests that by imagining happiness and joyous experience, teachers can actually enhance their creative motivation and belief and turn them into creative expression, by linking them to aesthetic attitudes, understanding of beauty, and their complete experience. Teachers can gain experience by listening to lectures, and apply their external experience to their internal process, which will enhance their creative beliefs and a sense of pleasure. Participation in artistic activities can enhance pleasant experience. For example, when they enjoy a performance in the concert or in the painting exhibition, the sensory experience (such as hearing and vision) functions as a link to connect with their internal enjoyment, memories and expectations of the beauty. Thus, what they observe and what they see from the outside are gradually absorbed and internalize into potential energy, which can eventually promote creativity. Therefore, the happy experience enables teachers to prolong pleasant moment through immersion or savoring, to stimulate their creative motivation and beliefs, and to promote their innovative behavior. It is, therefore, suggested that universities should not give much pressure to teachers for innovational purposes as a compulsory requirement. Rather, universities should create relatively free and pleasant environment, nurturing teachers' innovative behavior imperceptibly.

6.4.5 Exploring of the differences between teachers' savoring and innovation behavior in different subject areas should be encouraged

Results of the study prove that female teachers have higher savoring and aesthetic experience than their male counterparts. Moreover, teachers with different

teaching ages show significantly different savory beliefs. Specifically, teachers with less than five years of teaching career have higher savoring than those with more than 16-20 years because their creativities are distinguished by their teaching stages and experiences (Turner, 2013). In addition, their savoring levels may be differentiated by their various professional fields, which may make the innovative behavior different. Although this study involves teachers in divergent disciplines including design, management, pedagogy, and engineering, this research will not provide an analysis in depth in terms of this difference. Further research on this point will be encouraged and continued.

6.5 Research Limitations and Recommendations

This research provided relative systematic study on savoring, creative self-efficacy, aesthetic experience of the innovative behavior of university teachers; as, there are some inefficiencies which require further improvement in the future:

6.5.1 Limited by research methods, the questionnaire method is a self-assessment questionnaire. In the future, the research will discuss savoring in different perspectives by combining interview methods with experimental research etc.

The participants (subject) will fill the questionnaire after suggesting the positive emotions.. If the condition of subjects cannot be confirmed or the psychological level of the positive emotions cannot be reached before filling in the questionnaire, the correctness of savoring balance may be affected. In the future, the research shall be combined with interviews, helping the subjects engage into positive experience for filling in the questionnaire with higher accuracy. Moreover, deliberate

experiments shall be added with stimulating scenarios or online experiences of memorizing past, thus savoring the present and expecting the future to be set according to the tasting dimension of the triggered subjects. Further more, experiences of listening music and enjoying exhibitions will also be selected to study savoring behavior.

6.5.2 This study discusses the effects of savoring on innovative behavior of university teachers but lacks the distributing factors to savoring, including the achievement motivation.

In problem-solving and dilemma, people will integrate all the thoughts within savoring into a new concept while the achievement motivation drives the individual's task for a solving procedure in different methods or steps. But if, more mistakes will be caused, the real method must be found for solving the problem, which may be a very creative answer. Even though the person has savoring and innovative thoughts, further discussion on the achievement motivation is required for the performance of the innovative behavior. In the future, the effects of savoring on innovative behavior can be further discussed based on the effects of achievement motivations.

6.5.3 Discussion on the effects of social network on savoring and innovative behavior of university teachers

The research results show that sharing with others is a strategy with strong savoring effects. Social network is a system of interconnections composed of individuals connected in social relations. Individuals can be connected with relevant staff, including relatives, friends, colleagues, etc. where, individuals can share their experience in life through the interconnection. When facing difficulties, they can

better adapt (by harnessing the experience of others in the network). In perspective of social support, it is also necessary to share personal feelings. In Sharing feelings with others improves the joy of positive events. Bryant (2007) believes that having a larger social network can not only help people adapt to the environment but also make savoring more complete for innovative performance. It is suggested that further discussion on the effects of social network on the environment and innovative behavior should be researched or investigated.

6.5.4 It is suggested that further discussions be carried out based on the impact of savoring on innovative behavior by tackling the negative factors hindering creativity as a moderator variable or mediated variable in the future.

6.5.5 Discussion on the moderator effects of creative self-efficacy between savoring and innovative behavior

The research results also shows that savoring of teachers' behavior have no significant effects on innovative behavior but creative self-efficacy has positive effects on innovative behavior while savoring can indirectly affect innovative behavior through creative self-efficacy. Therefore, creative self-efficacy has an "adjusting effects" of savoring on innovative behavior. In other words, the interaction between savoring and creative self-efficacy may affect the performance of innovative behavior. Therefore, further discussion shall be made in this perspective.

6.5.6 Discussion on the effects of individual savoring in different industries on innovative behavior

This research takes the university teachers in educational industry as subjects without involving staff in other industries. However, savoring may differ between industries, including hi-tech and arts, thus making innovative behavior

different. In industries like hi-tech and arts, it is more urgent to investigate or research on innovative behavior where the effects of savoring on innovative behavior are more likely to be significant. It is suggested to further discuss the effects of savoring on innovative behavior of high-technician and art practitioners.



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APPENDIX

The influence of University Teachers' Savoring on Innovative Behavior: Questionnaire of Intermediate Effect of Creative Self-efficacy and Aesthetic Experience.

Dear teachers:

Hello! The purpose of this questionnaire is to investigate the influence of university teachers' savoring on innovative behavior in China: the mediating effect of creative self-efficacy and aesthetic experience as the data basis for scientific research. Please note that the questionnaire is anonymous. We solemnly promise that the results of the questionnaire will be only used for academic research rather than for any other purposes. Please take some gaps to help us finish this questionnaire. Your support and cooperation are appreciated.

Part 1 Basic information (please draw "V" on the options that suit your most)

1. Gender: ①male ②female
2. Education: ①College and below ②BA ③MA ④Ph.D
3. Age: ①30 and under 30 ②31—35 ③36—45 ④46—55 ⑤56 and over
4. Teaching Years: ① 5 and less ②6—10 ③11—15 ④16—20 ⑤21 and more
5. Marriage: ①Unmarried ②Married ③others
6. Professional Title: ①Junior ②mediate ③Associate Professor ④Professor
7. Subjects:
 - ①Philosophy ②Economics ③Law ④Education ⑤Literature ⑥History
 - ⑦Science ⑧Engineering ⑨Agriculture ⑩Medicine ⑪Military Science
 - ⑫Management ⑬Art
8. Job Categories:
 - ①Full-time teachers ②full-time researchers ③part-time teachers (full-time teachers who are also party and politic leaders) ④Full-time Counselors
 - ⑤Part-time Counselors (Full-time Teachers Part-time Counselors)
9. University level:

- ①“985” / “211” ②General undergraduate university
 ③Private university ④College

For each of the following descriptions, check the number that best fits your current situation. Choose ‘highly disagree’, ‘disagree’, ‘no comments’, ‘agree’, ‘strongly agree’, and mark in the form. There is no ‘right’ or ‘wrong’ answers, please be as honestly as possible.

Part 2 Savoring scale

Items	highly disagree	disagree	no comments	agree	strongly agree
1. I have the ability to reminisce about the good past.	1	2	3	4	5
2. I have the ability to optimistically imagine the future.	1	2	3	4	5
3. I have the ability to recount the lucky events of the past.	1	2	3	4	5
4. I have the ability to associate things with pleasure.	1	2	3	4	5
5. I have the ability to meditate on the joy of life.	1	2	3	4	5
6. I have the ability to share happiness with others.	1	2	3	4	5
7. I have the ability to completely relax and be immersed in happiness.	1	2	3	4	5
8. I have the ability to fully express the feelings of happiness.	1	2	3	4	5
9. I have the ability to create an atmosphere full of laughter.	1	2	3	4	5
10. I have the ability to engage in happy activities.	1	2	3	4	5

Part 3 Innovative behavior scale

Items	highly disagree	disagree	no comments	agree	strongly agree
1. At work, I will actively seek to apply new methods.	1	2	3	4	5
2. I often generate meaningful ideas and innovative ideas.	1	2	3	4	5
3. I will communicate and market my new ideas to leaders.	1	2	3	4	5
4. To realize my new ideas, I will find ways to get the resources I need.	1	2	3	4	5
5. I will actively develop appropriate plans for implementing innovative ideas.	1	2	3	4	5
6. Overall, I am an innovative and creative person.	1	2	3	4	5

Part 4 Creative self-efficacy scale

Items	highly disagree	disagree	no comments	agree	strongly agree
1. I can use creative ways to achieve most of the goals I set for myself.	1	2	3	4	5
2. When faced with difficult tasks, I am sure that I can do it creatively.	1	2	3	4	5
3. I believe that for what I am determined to do, I am committed to doing it in the most creative ways.	1	2	3	4	5
4. I can creatively overcome many challenges.	1	2	3	4	5
5. I am confident that I can accomplish many different tasks creatively.	1	2	3	4	5
6. Compared to others, I can do most of the tasks creatively.	1	2	3	4	5
7. Even if things are harder, I can still do them very creatively.	1	2	3	4	5

Part 5 Aesthetic experience scale

Items	highly disagree	disagree	no comments	agree	strongly agree
1. When I appreciate beautiful things, I feel happy.	1	2	3	4	5
2. When I appreciate colorful and harmonious things, I will feel relaxed and happy.	1	2	3	4	5
3. When I appreciate good things, I will feel happy and temporarily forget the things around me.	1	2	3	4	5
4. When I appreciate good things, I will feel happy and temporarily forget the things around me.	1	2	3	4	5
5. I like to appreciate and contact beautiful things.	1	2	3	4	5
6. I am sometimes unconsciously attracted by the beautiful things around me and feel happy.	1	2	3	4	5
7. I am sometimes unconsciously attracted by the beautiful things around me and feel happy.	1	2	3	4	5
8. I will accept and appreciate diverse cultural activities, such as different ethnic groups, beliefs, etc.	1	2	3	4	5
9. I will try to find good aspects of bad things.	1	2	3	4	5
10. When I contact beautiful things, it can stimulate my vitality and hope.	1	2	3	4	5
11. When I encounter difficulties or setbacks, I will appreciate it with a positive attitude.	1	2	3	4	5
12. I can see the details of things that are easy to be ignored by others.	1	2	3	4	5
13. I can see the details of beautiful things that are easy to be ignored by others.	1	2	3	4	5
14. I can analyze the styles of beautiful things.	1	2	3	4	5

Part 5 Aesthetic experience scale (continued)

Items	highly disagree	disagree	no comments	agree	strongly agree
15. I can understand the concept to be expressed by beautiful things.	1	2	3	4	5
16. I can analyze reasons that make things beautiful.	1	2	3	4	5
17. I will share and discuss things that I feel good with others.	1	2	3	4	5
18. When I create works, I will unconsciously think of things that are related to them.	1	2	3	4	5
19. When I create works, I will reminisce about the beautiful things that are related to them.	1	2	3	4	5
20. When I create works, similar things I have seen before can suddenly flash through my mind.	1	2	3	4	5
21. I will share my good experiences with others.	1	2	3	4	5

Thank you for your participating, best wishes.