

EMOTIONAL DISSONANCE, EMOTIONAL EXHAUSTION
AND WORK-FAMILY CONFLICT:
A STUDY OF COLLEGE TEACHERS IN CHINA

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- Spine -

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Abstract

The aim of the present research is to investigate the relationship among emotional dissonance, emotional exhaustion, and work-family conflict of college teachers in China. The data was collected through online questionnaires (N=330) and the responses were mainly component of college teachers from southern China. We have conducted a quantitative analysis of the survey data of 330 college teachers.

The results indicate that: (1) Emotional dissonance is positively correlated with emotional exhaustion; (2) Emotional dissonance is positively correlated with work-family conflict; (3) Work-family conflict is positively correlated with emotional exhaustion; (4) Work-family conflict partially mediates the relationship between emotional exhaustion and emotional dissonance.

Keywords: emotional exhaustion; emotional dissonance; work-family conflict; college teachers.

JEL Classification: M12; M54

摘要

本研究的目的是调查中国高校教师的情绪衰竭,情绪失调和工作家庭冲突之间的关系。本文数据通过在线问卷收集,有效问卷共 330 份,问卷主要采集自中国南方的高校教师。我们对这 330 名高校教师的调查数据进行了定量分析。

结果表明:(1)情绪失调与情绪衰竭之间呈现正相关的关系;(2)情绪失调与工作家庭冲突之间呈现正相关的关系;(3)工作家庭冲突与情绪衰竭之间呈现正相关的关系;(4)工作家庭冲突对情绪耗竭与情绪失调的关系有部分的中介作用。

关键词:情绪衰竭;情绪失调;工作家庭冲突;高校教师。

JEL 分类号: M12; M54

Resumo

O objetivo do presente estudo é investigar a relação entre esgotamento emocional, dissonância emocional e conflito trabalho-família de professores universitários na China. Os dados deste relatório foram coletados através de questionários on-line (N = 330) e as respostas deste relatório foram principalmente componentes de professores universitários do sul da China. Nós realizámos uma análise quantitativa dos dados da pesquisa destes 330 professores universitários.

Os resultados obtidos indicam que: (1) A dissonância emocional está correlacionada positivamente com o esgotamento emocional; (2) A dissonância emocional está positivamente correlacionada com o conflito entre trabalho e família; (3) Conflito trabalho-família está positivamente correlacionado com o esgotamento emocional; (4) O conflito entre trabalho e família medeia parcialmente a relação entre esgotamento emocional e dissonância emocional.

Palavras-chave: esgotamento emocional; dissonância emocional; conflito trabalho-família; professores universitários.

JEL Classification: M12; M54

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List of Abbreviations

EE	Emotional Exhaustion
ED	Emotional Dissonance
WFC	Work - family Conflict
COR	Conservation of Resource Theory

Chapter 1 Introduction

1.1 Background

McGuire (1979) first introduced burnout into education area (Liu, 2017). In 1983, the American Teachers Association indicated that teachers are a high-risk group of burnouts, and 37.5% of teachers have a serious degree of burnout (Fu, 2015). However, this phenomenon does not exist only in the United States, but is widespread in the world, including the universities in China (Zhang, 2018). In China, the survey results show that in the 15 industry's burnout index survey, teachers' burnout is only lower than civil servants and logistics and transportation practitioners, ranking third (Li, 2012).

In China, by the end of 2016, the number of college teachers is 1.602 million, an increase of 35,500 over the previous year, and the ratio of teachers to students was 1:17.07, according to the 2016 year national education development statistical communique (Ministry of Education of the People's Republic of China, 2016). We can see that the number of teachers is huge and it is growing rapidly. With the rapid development of social science and technology and the speed of knowledge update, college teachers may not only face increasingly complex teaching tasks, but also need to complete more scientific research tasks (Fu, 2015). College teachers may suffer job burnout because they can not relieve their work pressure in a timely and effective manner (Fu, 2015). Besides, emotional exhaustion is the pressure dimension of college teachers' job burnout (Liu, 2017). Teaching is a profession with characteristic of high degrees of emotional exhaustion (Hakanen et al., 2006; Maslach et al., 2001).

The emotional exhaustion of college teachers in China may be caused by several reasons as below. Because of the high expectations from Chinese people to their children's education, which put forward a high requirement for the responsibility of teacher (Chen, 2016). Besides, with the expansion of the scale of higher education and

the deepening of the reform of college education system, the university has higher standards for the quality and capability of college teachers (Sun, 2009). Performance appraisal, teaching evaluation by students, pressure for publication and competition for promotion make many teachers uneasy (Fu, 2015). With the deepening of the reform of the education system in universities, Chinese teachers are no longer a long-term stable profession, but subject to varied kinds of evaluations. The pressure for evaluation of professional titles, the time conflict between teaching and research, and the pressures caused by the quantification of the work of teaching have caused many college teachers to be in a state of tension chronically (Sun, 2009). Particularly, the excessive workload leads to emotional exhaustion of college teachers (Fu, 2015).

In addition, Carson (2006) argued that job burnout may be an emotional condition for teachers as emotions play an important role in emotional exhaustion among teachers and teacher attrition (Uitto et al., 2015). Zhang and Zhu (2008) suggest that emotional labour influences teachers' burnout in the Chinese context.

According to Golombek and Johnson (2004), the emotional dissonance of teachers initially recognize the cognitive dissonance, an identification of conflicts in their teaching circumstances. Teaching entails considerable investments of emotional labour (Hargreaves, 1998). However, only a small percentage of job burnout studies investigated the emotional factors of teaching in the setting of teacher burnout (Carson 2006; Zellars et al. 2004).

Nias (1989) suggests that teachers are rarely trained to deal with workplace emotional interchanges and responses in creative and wholesome methods. In comparison, numerous other human services professional training clearly solves emotional boundaries and vocational distance issues (Green et al., 2007; Tuckey, 2011). Therefore, we need to study in depth about the topics such as emotional dissonance and emotional exhaustion in the teacher professional to help the college teachers better understand and deal with these issues.

Work-family conflict is also an important factor affecting emotional exhaustion, except for emotional dissonance. Chinese government shifted from one-child policy to two-child policy in 2015. Since then many couples started to have second child. As the number of increases, work-family conflict may aggravate. Because college teachers' heavy work characteristics, it is difficult for teachers to take care of both work and family. They are busy with teaching, research, and rarely spend time with their families (Liu & Ye, 2016).

Tang (2010) suggested that work-family conflict is an important predictor of college teachers' job burnout, and work-family conflict can significantly predict positive emotional exhaustion. Besides, Ayo et al. (2009) argued that inexperienced teachers, female teachers and teachers with babies were exposed to more conflicts. Thus, we need to better understand the relationship of work-family conflict and emotional exhaustion and maybe whether emotional dissonance and work-family conflict have collective effects on emotional exhaustion on teachers.

1.2 Research Questions

As mentioned above, in this research, we intend to deeply understand the relationship of emotional exhaustion and emotional dissonance of college teachers. And the role of work-family conflict in the relationship between emotional exhaustion and emotional dissonance and the impact on teachers' work and life. We have conducted extensive literature reviews of previous relevant researches.

I am interested in understanding the issues of emotional dissonance, emotional exhaustion and work-family conflict experienced by Chinese college teachers and the relationship between these variables. Therefore, this study aims to answer the following questions: 1) What is the relationship between emotional dissonance,

emotional exhaustion and work-family conflict? 2) What is the role work-family conflict plays in the relationship between emotional exhaustion and emotional dissonance? 3) What are the level of emotional dissonance, emotional exhaustion and work-family conflict?

1.3 Structure

In the following chapters of this thesis, we will do an unfold discussion about the impact and role of emotional exhaustion, emotional dissonance and work-family conflict in college teachers. There are totally five sections in this dissertation. In the first chapter, we have introduced the background and structure of our research and proposed research questions as well as purposes. Afterwards, we will introduce the literature review on emotional exhaustion, emotional dissonance and work-family conflict and the relationship between them to develop the theoretical framework and hypotheses of this study. In the third chapter, we will explain the methodology used in the present study. In Chapter four, we will describe our results and interpretation of our hypotheses, analyzes, and discusses them. In Chapter five we summarize the findings in the study and discuss the implications of management. Finally, we will draw conclusions and discuss the limitations of this research and suggestions for future researches.

Chapter 2 Literature Review

2.1 Emotional Exhaustion

Maslach and Jackson (1981) contended that burnout is a manifold state that is developed to cope with the accumulation and restless work pressure. Burnout was considered as an index that workers are no more capable to adequately moderate their emotions when interacting with customers (Morris & Feldman, 1997; Lee & Ashforth, 1996). Maslach et al. (2001) argued that burnout is the consequence of a sophisticated interaction of elements in employees' work and non-work lives. Sogaard et al. (2007) considered burnout as a work-associated indicator in the psychological health.

Maslach and Jackson (1986) proposed burnout consists of three dimensions, emotional exhaustion (feeling emotionally exhausted through one's communication with other persons), depersonalization (demotivated feelings and misanthropic attitudes towards the receivers of one's care or service) and diminished personal accomplishment (a tendency to assess negatively one's own job). Van Dierendonck et al., (2001) supposed that emotional exhaustion is the central component of burnout.

Emotional exhaustion is the original and most notable performance of the burnout procedure and is normally assumed as a condition of emotional and mental fatigue that develops as emotional strength is consumed (Evers et al., 2004). Lingard and Francis (2005) mentioned that emotional exhaustion is the burnout dimension very powerfully and consistently associated with deleterious results for organizations and individuals. According to Maslach and Leiter (2008), emotional exhaustion is a situation of mental and emotional obstruction causing constant stress that results in high depersonalization and burnout. Li et al., (2017) suggests that two complicated reasons result in emotional exhaustion: (1) the consuming of mental resources by the endeavours of the emotional adjustment process (Grandey, 2003), and (2) the

increased job-induced strain that emotional dissonance can be created (Lewig & Dollard, 2003).

2.2 Emotional Dissonance

Emotional dissonance was termed by Ashforth and Humphrey (1993) as the incongruity between action and feeling. Emotional dissonance originates from the theory of emotional labour (Rutner et al., 2008). Zapf et al., (2001) argued emotional dissonance as a stressful aspect of emotional labour. For example, some college teachers are inclined to conceal their authentic emotions (e.g. disappointment and anger), whereas they are showing enthusiasm and humour other than being genuine (Zhang & Zhu, 2008).

Brotheridge and Lee (2003) suggested that emotional dissonance may be connected with either surface or deep acting. Surface acting and deep acting are two regulation strategies of emotional labour (Hochschild, 1983). And through “deep acting” and “surface acting”, appropriate emotional expression can be expressed (Heuven & Bakker, 2003; Grandey, 2000). According to Noor and Zainuddin (2011), there exists a dissonance between displayed and hidden emotions in surface acting. Surface acting was defined by Hennig-Thurau et al., (2006) as the act of exhibiting an emotion that is not experienced and could affect both suppression of felt emotions and counterfeiting of unfeeling emotions. Grandey (2003) also emphasized that when surface acting, a person can experience emotional dissonance due to variance between inner feelings and countenances. For example, when a teacher feels angry with students, he/she has to pretend and hide anger as part of the job (Noor & Zainuddin, 2011).

Ashforth and Humphrey (1993) indicated that when engaging in deep acting, the actor tries to modify the feeling to fit the desired performance. Brotheridge and Grandey (2002) claimed that when performing deep acting, the staffs must not only control

their own physical performance, but also try their best to modify their inner feelings (i.e., emotional dissonance) in behalf of achieve the desired emotional display.

In the situation of emotion work, emotional dissonance is a sign of overloading an individual's capabilities, resources and requirements in a social interaction with customers (Zapf et al., 2001). Moreover, emotional dissonance was marked as the maladjustment between showed and felt emotions in a service interaction (Zapf, 2006; Zapf et al., 1999). Emotional dissonance influences total human service workers, even if they may differ in the magnitude to which their work includes lasting associations with customers/clients, and in the number of training they have received to cope with customer/client-related social stressors (Lewig & Dollard, 2003).

2.3 Work–Family Conflict

Work–family conflict is conceptualized as *‘a form of interrole conflict in which the role pressures from the work and family domains are mutually incompatible in some respect’* (Greenhaus & Beutell, 1985: 77) and is considered to be composed of two separate parts: (1) work–family conflict and (2) family–work conflict. On account of preceding literature has indicated that work elements are more strongly connected with work–family conflict than family–work conflict, we concentrated on work–family conflict in this research (e.g. Byron, 2005; Carlson et al., 2000).

Netemeyer et al., (1996) defined work–family conflict as a type of interrole conflict where the ordinary requirements of, time devoted to, and strain occasioned by the job meddle with performing family-related duties. Work-family conflict was conceptualized by Hämmig et al., (2009) as the conflict between work and family requirements including conflict between work and other role obligations and expectations in individual life. Additionally, work–family conflict is conceived as a mechanism through which work role stress impacts well-being. For instance, work

interference with household life mediates the association between well-being and workload (Guerts et al., 2003).

In other researches, work–family conflict is characterized as a consequence or pressure reaction, ascending as an outcome of a combination of work and/or family stressors (Boyar et al., 2003). Researchers used more complicated models in which work family conflict is considered as a mediator in the stressor–strain association (Baron & Kenny, 1986). Sometimes work–family conflict is considered as a source of pressure which, as well as other stressors, will have a harmful effect on well–being (e.g. Grant-Vallone & Donaldson, 2001). For example, work role conflict and workload have been compatible predictors of work interference with family (Boyar et al., 2003).

2.4 Research Hypotheses and Research Model

2.4.1 Research Hypotheses

Emotional dissonance has been supposed to be linked to burnout (Andela & Truchot, 2017; Noor & Zainuddin, 2011). For example, Zapf and Holz (2006) stated that emotional dissonance has a powerful effect on burnout contrasted to other emotional demands, such as necessities to display negative or positive emotions and sensitivity requirements. Therefore, it anticipated to associate with a higher degree of burnout (Hochschild, 2003).

Maslach et al., (2001) argued that the origins of teacher’ s burnout have miscellaneous components. Teaching is a type of emotional labour, yet too excess emotional labour may cause a high level of stress and lead to burnout (Yin, 2016; Yin et al, 2013; Cheung et al., 2011). Zhang and Zhu (2008) proposed that surface acting has negative impacts on the teacher satisfaction and burnout. And surface acting is often associated

with emotional dissonance (Morris & Feldman, 1996). And because of the inauthentic or fake emotional displays caused by surface acting, it has been suggested that emotional dissonance was a direct result of surface acting (Karim, 2009). Therefore, Postareff and Lindblom-Ylänne (2011) stated that the emotional dissonance between external feelings and hidden emotions might result in discontent and even burnout.

Because emotional exhaustion is viewed as the central component of burnout action (Maslach, 1982). Thus, emotional dissonance is connected with emotional exhaustion (Abraham, 1998; Morris & Feldman, 1997). The researches of Zapf (2002) argued that emotional dissonance is a stressor that is positively connected with emotional exhaustion. Emotional dissonance was found by Lewig and Dollard (2003) that aggravates the extent of emotional exhaustion at high degrees of psycho-social demands. The study of Karatepe and Choubtarash (2014) also indicates that emotional dissonance results in emotional exhaustion which turn can worsen absenteeism and turnover intentions. Thus, based on the existing empirical findings and theoretical thoughtfulness and in accord preceding research, we hypothesized that:

Hypothesis 1: *Emotional dissonance is positively related with emotional exhaustion.*

Investigating the role of emotional dissonance as the pioneer of work–family conflict made some researches expanded the focus. For instance, emotional dissonance has great adverse effect on psychological well-being (Morris and Feldman, 1997). The hiding of true feelings and emotions has negative impacts on well-being (Bakker & Heuven, 2006). Besides, extensive researches have illustrated a negative association among work-family conflict, affective and physical well-being (e.g., Allen et al., 2000; Frone et al., 1997). Thus, the study of Nancy et al., (2010) claimed that emotional dissonance is connected with work–family conflict.

In addition, Karim (2009) indicated that both deep acting and surface acting are

positively associated with work–family conflict. Since surface acting was considered as an essential variable contributing to more than 75% of variance of work–family conflict (Karim, 2009). Surface acting raises emotional dissonance (a gap between expressed and felt emotions) (Grandey, 2003). Thus, we hypothesize the association between emotional dissonance and work–family conflict:

Hypothesis 2: *Emotional dissonance is positively related with work–family conflict.*

Previous research indicates that work-family conflict and burnout are associated (Innstrand et al., 2011; Westman et al., 2008; Netemeyer et al., 1996). Karatepe and Uludag (2007) suggested that role ambiguity strengthens emotional exhaustion. Role conflicts can lead to college teachers' mental fatigue and ambiguous work goals, inefficiency, and easy entry into job burnout (Fu, 2015). Thompson et al., (2005) proposed that work stress make effects on the family surroundings through emotional exhaustion in a research of Australian policewomen.

In the research on abusive supervision of 328 workers, Carlson et al., (2012), indicate that associations between burnout and work–family conflict are mutual. Work–family conflict has an effect on emotional exhaustion (Vignoli et al., 2016; Lizano & Barak, 2012). Posig and Kickul (2004) also argued that one of the key cause of emotional exhaustion is work–family conflict.

Work-family conflict was defined by Simbula et al., (2011) as a job demand that impacts emotional exhaustion. The most direct manifestation of teachers who suffered a long-term work-family conflict is influencing the emotional state of work, he/she may lose interest in the profession of the teacher, and then will suffer emotional exhaustion. Work-family conflict can make positive prediction on emotional exhaustion (Tang, 2010). These researches leads to following prediction:

Hypothesis 3: *Work–family conflict is positively related with emotional exhaustion.*

Work–family conflict is the main reason of emotional exhaustion, and as well as a mediating variable between roles, work, anticipation and emotional exhaustion (Posig & Kickul, 2004). For example, work–family conflict has influences on the emotional exhaustion, for employees in the Chinese electronics industry (Yu et al., 2010). The results of Lingard and Francis (2005) subscribe the mediation model of work–family conflict, where work interference with family and home life considers as an interfering variable among work stressors and male staffs' emotional exhaustion. Major et al., (2002) found that work-family conflict has mediation effects on work time and psychological distress. Montgomery et al., (2006) claimed that work–family conflict is one of the potential constructs that can be viewed as an associated mechanism between psychological health and emotional labour.

Emotional exhaustion is the first symbol in the procedure of burnout establishment (Alarcon, 2011; González-Romá et al., 1998), according to the (COR) Model Theory (Hobfoll, 2002). The Conservation of Resources (COR) Model (Hobfoll, 1989) is a unified model of pressure that includes several stress theories. The Conservation of Resources (COR) Model was an integrated stress model and an alternative framework for understanding the relationships of work-family (Grandey & Cropanzano, 1999). For instance, the (COR) Model presents that work–family conflict results in pressure since resources (e.g., energy, time) "*are lost in the process of juggling both work and family roles*" (Hobfoll, 1989: 352), which in turn causes job anxiety, dissatisfaction and considers about quitting one's job. The conflict between staffs' work and home lives was supposed by the Conservation of Resources (COR) Model that may drain resources, or fuel perceptions of drained resources, and therefore result in harmful consequences which may include work–family and family–work conflict (Adkins & Premeaux, 2012).

Additionally, Montgomery et al., (2003) supported that the connection between work–family conflict, emotional labor and emotional exhaustion shows that work–family conflict partly mediate the association between surface acting and emotional exhaustion. Work–family conflict mediates the association between both schedule irregularity and work hours and emotional exhaustion (Lingard & Francis, 2005). Karim (2009) suggested that work-family conflict can mediate the association between emotional labor strategies (i.e. surface acting/deep acting) and psychological distress. Besides, work–family conflict has an indirect influence on the surface acting and burnout association, other than a more direct moderator impact (Noor & Zainuddin, 2011). Based on these previous researches, we proposed the following hypothesis:

Hypothesis 4: *Work–family conflict will mediate the association between emotional dissonance and emotional exhaustion.*

2.4.2 Research Model

Taking into account the literature review, the complete research model that incorporates all the hypotheses is shown below.

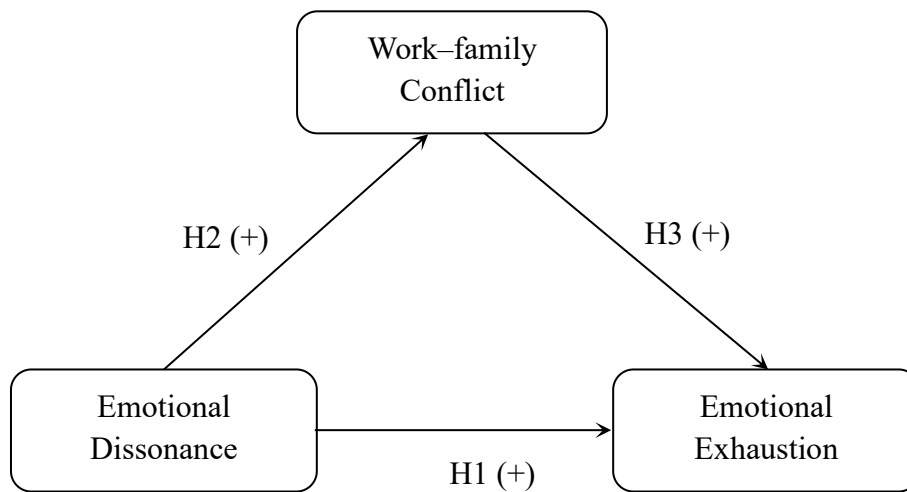


Figure 1. Proposed mediation model

Figure 1. Graphical depictions of the three pathways. (H1) Emotional dissonance is positively related with emotional exhaustion. (H2) Emotional dissonance is positively related with work–family conflict. (H3) Work–family conflict is positively related with emotional exhaustion. (H4) Work–family conflict will mediate the association between emotional dissonance and emotional exhaustion.

Chapter 3 Methodology

3.1 Sampling and Procedure

In accordance with the literature review and the current situation of China's education, we determined to design a relevant questionnaire from some previous research scales. Since our research objects of this study are college teachers, we distributed questionnaires to several universities in southern China via Internet (via e-mail, WeChat, social media and other types of Internet communications).

The data collected and received 373 responses between June - August 2017. After deleting the invalid questionnaires, there were 330 valid complete responses. On this basis, data analysis consists of two parts. We examined the quality of the questionnaire (validity and reliability) followed by the tests of hypotheses.

3.2 Measures

Three sections constitutes our questionnaire including Emotional Exhaustion, Emotional Dissonance, and Work-Family Conflict.

Emotional Exhaustion: Emotional exhaustion was measured by the sub-scale of Maslach Burnout Inventory (MBI) to suit the Chinese situation (Maslach et al., 1996). The original scale containing 5 items was projected to measure the emotional exhaustion of burnout (e.g. "Working with people all day is really a strain for me"). The questionnaire is a 6-point Likert scale arranged from "Never" (1) to "Almost Every day" (6). When the score is higher, the subject's emotional exhaustion is higher.

Emotional Dissonance: Emotional dissonance was measured using the Frankfurt Emotion Work Scales-E (FEWS) of Zapf et al., (1999). This part of the questionnaire

involves showing the display emotions and actual inner feelings. The research used FEW scales, which included 4 items of emotional dissonance. A sample item would be "How often in your job do you have to suppress emotions in order to appear 'neutral' on the outside?" Answers are required to rate with each item on a 6-point scale from "Never" (1) to "Always" (6).

Work-Family Conflict: Work-family conflict was measured by the 5-item scale developed by Netemeyer et al., (1996). The original scale containing 5 items was projected to measure the work-family conflict (e.g. "The demands of my work interfere with my home and family life"). Answers are required to rate with each item on a 6-point scale from "very strongly disagree" (1) to "very strongly agree" (6).

Demographic Variables: For the section of correlation variables (respondent's information), the respondents are required to fill in the personal information including age, gender, job category including teachers and administration staffs, university type including Tier-1 Universities, Tier-2 or Tier-3 Universities and higher vocational Colleges.

3.3 Statistical Analysis

Because our questionnaire cited several English scales or sub-scales, it was translated into Chinese and delivered to respondents with some of the contents changed. The respondents' understanding of translation may be inconsistent with the original questions. Thus, we conducted to show the quality of each variable, which is composed of reliability and validity, to examine the effectiveness of this questionnaire. And the coefficients alpha internal consistency reliability has been mentioned above.

Next, the correlation was measured. And T-test analysis was performed to examine the differences in key variables among the different audiences of the study. Moreover,

one-way ANOVA analysis was performed to examine the differences of the key variables on university type and weekly working hours. After then, we used regression analysis to test the explanatory and mediator effects of the model. This process containing: (1) There must be a significant association between the independent variable and the dependent variable; (2) The mediating variable must display a significant relationship with the independent variable; (3) In the situation of controlling the independent variable effect, the mediator variable still having influence on the dependent variable; (4) Considering the mediator variable, if the independent variable and the dependent variable are significantly reduced in the control. In addition, mediation is considered to be partial if the independent variables and affiliations are still important. Finally, we mention the Sobel-test to test whether the effect of mediation is significant.

Chapter 4 Result

4.1 Participants

The participants were college teachers and mainly from Southern China. In table 1, the distribution of age cohort was well-balanced in 30 years old and below, 31-40 years old and 41 years old and over. The majority of respondents were female (63.9%) and most of them (74.6%) were married persons. The highest educational level of respondents were mostly bachelor's degree or below (47.9%), followed by master's degree (39.1%).

The professional tenure of participants is showed as follows: nearly half of the people (47.9%) worked for more than 10 years, followed by 34.2% who had worked for 3 to 10 years. Regarding the job category, 62.7% of teachers and 37.3% of administration staffs were involved. And considering the university type, 40.6% of our respondents were working in the Tier-2 or Tier-3 Universities and 37.0% of them were working in the higher vocational colleges. The majority of respondents worked 40-50 hours per week (43.6%), followed by less than 40 hours (40.9%).

Table 1 Demographic characteristics of participants

Measure	N=330	%
Gender		
Female	211	63.9
Male	119	36.1
Age		
≤ 30	106	32.1
31-40	117	35.5
≥ 41	107	32.4
Marital Status		
Single	80	24.2
Married	246	74.6
Others (divorcee)	4	1.2
Highest Educational Level		
Bachelor degree or below	158	47.9
Master degree	129	39.1
Doctor degree	43	13.0
Job Category		
Teacher	207	62.7
Administration staff	123	37.3
University Type		
Tier-1 Universities	74	22.4
Tier-2 or Tier-3 Universities	134	40.6
Higher vocational Colleges	122	37.0
Professional Tenure		
< 3 years	59	17.9
3-10 years	113	34.2
> 10 years	158	47.9
Weekly Working Hours		
< 40 hours	135	40.9
40-50 hours	144	43.6
>50 hours	51	15.5

4.2 Factor Analysis

4.2.1 Emotional Exhaustion

In table 2, an exploratory factor analysis of five items was conducted. The Cumulative Squared loadings in our research is 79.33%, displaying a “very good” percentage (Tabachnick & Fidell, 2007) of extracted principle components remains in our factor analysis. The scale showed that the solution is valid (KMO = .898; Bartlett’s $X^2 = 1350.751$; $P < .001$), parsimonious and meaningful. The construct includes five statement like “I feel used up at the work day”. The Cronbach’s alpha was 0.934.

Table 2 Emotional Exhaustion - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.966	79.33	79.33	3.966	79.33	79.33
2	0.328	6.561	85.891			
3	0.298	5.97	91.861			
4	0.221	4.411	96.271			
5	0.186	3.729	100			

Extraction Method: Principal Component Analysis

4.2.2 Emotional Dissonance

The Cumulative Squared loadings (65.773%) shows the good percentage of extracted principle components remains in our factor analysis shown as table 3. The initial exploration displays a clean one-factor solution which is both valid (KMO = .696, Bartlett’s $X^2 (6) = 545.333$, $p < .001$), parsimonious and meaningful. The construct contains four statements such as “How often in your job do you have to display emotions that do not agree with your true feelings?”. The Cronbach’s alpha was .824.

Table 3 Emotional Dissonance - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.631	65.773	65.773	2.631	65.773	65.773
2	0.718	17.939	83.712			
3	0.405	10.121	93.834			
4	0.247	6.166	100			

Extraction Method: Principal Component Analysis

4.2.3 Work-Family Conflict

In table 4, an exploratory factor analysis of five items was conducted. The Cumulative Squared loadings (70.979%) indicates the "very good" percentage of extracted principle components remains in our factor analysis. An initial exploration displays a final one-factor solution which is both valid (KMO = .860, Bartlett's $X^2(10) = 1072.193$, $p < .001$), and meaningful. The construct therefore contains five statements such as "My job produces strain that makes it difficult to fulfill family duties". The Cronbach's alpha was .895.

Table 4 Work - Family Conflict - Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.549	70.979	70.979	3.549	70.979	70.979
2	0.595	11.903	82.882			
3	0.456	9.12	92.001			
4	0.233	4.653	96.655			
5	0.167	3.345	100			

Extraction Method: Principal Component Analysis

4.2.4 Validity analysis

We will introduce the tests we conducted to demonstrate the quality of each measure of three variables (emotional exhaustion, emotional dissonance and work-family conflict) in this part.

We utilize the principal component with Varimax rotation to run an explanatory factor analysis to test the scale's validity, providing us information such as Keiser - Meyer-Olkin (KMO). The sampling adequacy should be higher than 0.600 (Hair et al., 2006). And, if the p value is below 0.05, the Bartlett test is further analyzed. In the rotated component matrix (feature value > 1), all items with a community below 0.60 will be removed from the analysis.

We can see table 5 below. The value of KMO is 0.886 (approach to 1), which represents a significant correlation among three variables, by interpretative factor analysis, while Barlett's test shows good construct validity (Chi-square: 31408.35 , df: 91, Sig.: .000). The cumulative squared load in our study was 72.625% (approximately 0.73), indicating that the "very good" percentage of the extracted principal components (Tabachnick & Fidell, 2007) remained in our factor analysis, as shown in table 6. After the rotation, 14 of the three communities whose main components exceeded the required value of 0.60 were extracted, as shown in Table 7 below.

Table 5 KMO and Bartlett's Test

Keiser-Meyer-Olkin Measure of Sampling Adequacy.		.886
Bartlett's Test of Sphericity	Approx. Chi-Square	3148.035
	df	91
	Sig.	.000

Table 6. Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	6.213	44.377	44.377	6.213	44.377	44.377
2	2.166	15.474	59.851	2.166	15.474	59.851
3	1.788	12.773	72.625	1.788	12.773	72.625
4	0.751	5.366	77.991			
5	0.602	4.298	82.289			
6	0.437	3.123	85.412			
7	0.404	2.883	88.295			
8	0.33	2.356	90.651			
9	0.301	2.151	92.802			
10	0.243	1.738	94.54			
11	0.228	1.632	96.171			
12	0.202	1.445	97.616			
13	0.179	1.276	98.892			
14	0.155	1.108	100			

Extraction Method: Principal Component Analysis.

Table 7. Summary of the Factor Analysis of Three Scales

Scale	Items	Extraction Component		
		1	2	3
Emotional Exhaustion	I feel emotionally drained from my work.	.872		
	I feel fatigued when I get up in the morning and have to face another day on the job	.861		
	I feel used up at the work day.	.851		
	I feel like I'm at the end of my rope.	.850		
	Working with people all day is really a strain for me.	.824		
Work-Family Conflict	Things I want to do at home do not get done because of the demands my job puts on me.		.868	
	The amount of time my job takes up makes it difficult to fulfill family responsibilities.		.846	
	My job produces strain that makes it difficult to fulfill family duties.		.835	
	Due to work-related duties, I have to make changes to my plans for family activities		.735	
	The demands of my work interfere with my home and family life.		.715	
Emotional Dissonance	How often in your job do you have to display emotions that do not agree with your actual feelings towards the clients?			.835
	How often in your job do you have to display emotions that do not agree with your true feelings?			.827
	How often in your job do you have to display pleasant emotions (i.e. friendliness) or unpleasant emotions (i.e. strictness) on the outside while actually feeling indifferent inside?			.772
	How often in your job do you have to suppress emotions in order to appear "neutral" on the outside?			.749

4.3 Correlation analysis

Table 8 reports the correlation between key variables. These findings provide the preliminary support for the proposed research model. The results showed that emotional exhaustion, emotional disorder and work-family conflict were mutual significantly correlated with each other.

In addition, among demographic factors, weekly working hours are positively associated with emotional exhaustion and work-family conflict. The number of dependents is positively associated with emotional dissonance and work-family conflict. Besides, the results indicated that marital status and job category have positive association with work-family conflict. The highest educational level is positively associated with emotional dissonance.

Table 8. Correlations

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1 Gender	1.64	0.481												
2 Age	2.00	0.805	-.005											
3 Marital Status	1.77	0.450	-.048	-.090										
4 H.E.L.	1.65	0.699	-.068	.099	.092									
5 Professional Tenure	2.30	0.755	-.028	.830**	-.002	.204**								
6 Weekly working hours	1.75	0.707	-.074	.130*	-.022	-.008	.098							
7 Number of Offspring	1.91	0.723	-.106	-.114*	.672**	.085	-.076	-.017						
8 Number of Dependents	2.43	1.165	-.037	.144**	.149**	.035	.064	.096	.091					
9 Job Category	1.37	0.484	-.021	.216**	-.051	.008	.167**	.260**	-.013	.049				
10 University Type	2.15	0.758	.061	-.285**	-.026	-.386**	-.268**	-.016	.031	-.081	.001			
11 E.E.	3.03	1.054	.052	.050	-.027	.001	-.001	.244**	-.103	.035	.014	-.005		
12 E.D.	3.33	0.957	-.079	.001	-.006	-.199**	-.090	.081	.056	.122*	-.056	.034	.290**	
13 WFC	3.62	1.052	-.041	.043	.136*	-.043	.041	.201**	.065	.132*	.120*	.016	.521**	.298**

N = 330

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

S.D. = Std. Deviation ; H.E.L. = Highest Educational Level ; E. E. = Emotional Exhaustion; E. D. =Emotional Dissonance; WFC = Work-family Conflict

For age, 1 ≤ 30 years, 2 = 31-40 years, 3 ≥ 41 years.

For professional tenure, 1 < 3 year, 2 = 3-10 years, 3 > 10 years

4.4 Analysis of Independent samples T-Test

Table 9 showed the summary of the difference of the key variables on job positions by using Independent samples T-Test analysis.

Table 9 T-Test Results of Key Variables

Variables	EE Mean (SD)	ED Mean (SD)	WFC Mean (SD)
Highest Educational Level			
Bachelor degree or below (n=158)	3.02 (1.08)	3.54 (0.94)	3.68 (1.09)
Master degree and Doctor degree (n=172)	3.04 (1.03)	3.14 (0.93)	3.57 (1.01)
F	.012	.841	1.37
Sig.	.851	.000	.334
Number of Dependents (parents and children)			
< 3 persons (n=180)	3.02 (1.03)	3.20 (1.01)	3.53 (1.03)
≥ 3 persons (n=150)	3.08 (1.10)	3.49 (0.89)	3.73 (1.10)
F	.056	2.789	.002
Sig.	.662	.009	.098

Note: EE = Emotional Exhaustion; ED = Emotional Dissonance; WFC = Work-family Conflict

Sig. = Sig (2-tail)

From Table 9, it can be seen that there is a significant difference in the level of emotional dissonance regarding college teachers' highest educational level between Low-educated teachers (bachelor degrees or below) and highly educated teachers (master degree and doctor degree). Low-educated teachers (Mean = 3.54, SD = 0.94) in the sample indicated a higher emotional dissonance than highly educated teachers (Mean = 3.14, SD = 0.93). Additionally, there is a significance difference of the level of emotional dissonance regarding the number of dependents for teachers between

less dependents (parents and children < 3 persons) and more dependents (parents and children \geq 3 persons). College teachers with more dependents showed a higher emotional dissonance than the teachers with less dependents.

4.5 Analysis of ANOVA Test

Table 10 is the summary of the difference of the key variables on university type by using analysis of variance (ANOVA).

Table 10 ANOVA Results of Key Variables by University Type

	Emotional Exhaustion	Emotional Dissonance	Work-Family Conflict
Tier-1 Universities (n = 74)	3.11 (1.19)	3.42 ^{ab} (.97)	3.70 (1.03)
Tier-2 or Tier-3 Universities (n = 134)	2.95 (.99)	3.18 ^b (.95)	3.49 (1.06)
Higher vocational colleges (n = 122)	3.07 (1.04)	3.45 ^a (.94)	3.70 (1.06)
F	.664	3.076*	1.593

Mean values are reported with standard deviations in parentheses.

Means with the different superscript letter (a or b) are significantly different at the 0.05 level by post hoc LSD test. * $p \leq .05$

Means with two letters (ab) are not significantly different with other measures at the 0.05 level by post hoc LSD test. * $p \leq .05$

Table 10 shows that there is significant difference on the level of emotional dissonance regarding university type between Tier-1, Tier-2 or Tier-3 universities and higher vocational colleges. The respondents from Tier-2 or Tier-3 universities in the sample reported the lowest value (Mean = 3.18, S.D. = .95) about emotional dissonance while the higher vocational colleges the highest (Mean = 3.45, S.D. = .94) with Tier-1 universities in the middle (Mean = 3.42, S.D. = .97), showing that teachers of Tier-1 universities and higher vocational colleges suffered a higher degree of emotional dissonance than teachers in Tier-2 or Tier-3 universities. However, the significance difference only exist the respondents worked in Tier-2 or Tier-3

universities and higher vocational colleges.

Table 11 is the summary of the difference of the key variables on weekly working hours by using analysis of variance (ANOVA).

Table 11 ANOVA Results of Key Variables by Weekly Working Hours

	Emotional Exhaustion	Emotional Dissonance	Work-Family Conflict
< 40 hours (n =135)	2.76 ^c (.83)	3.27 (.95)	3.40 ^e (.97)
40-50 hours (n = 144)	3.11 ^b (1.08)	3.32 (.94)	3.68 ^d (1.07)
>50 hours (n = 51)	3.49 ^a (1.30)	3.52 (1.01)	4.01 ^d (1.10)
F	10.388***	1.282	6.891**

Mean values are reported with standard deviations in parentheses.

Means with the different superscript letter (a,b,c) are significantly different at the 0.05 level by post hoc LSD test.

Means with the different superscript letter (d or e) are significantly different at the 0.05 level by post hoc LSD test. * $p \leq .05$, ** $p \leq .01$, *** $p < .001$

Table 11 shows that there is significant difference on the level of emotional exhaustion regarding weekly working hours between less than 40 hours, 40-50 hours and more than 50 hours. The respondents worked less than 40 hours per week (Mean = 2.76, S.D. = .83) in the sample displayed the lowest value about emotional exhaustion while worked more than 50 hours (Mean = 3.49, S.D. = 1.30) the highest with 40-50 hours (Mean = 3.11, S.D. = 1.08) in the middle, showing a tendency of higher weekly working hours, higher emotional exhaustion. Significance differences exist among the three groups of respondents worked less than 40 hours per week and 40-50 hours, as well as more than 50 hours on the level of emotional exhaustion.

Additionally, there is significant difference on the level of work-family conflict

regarding weekly working hours between less than 40 hours, 40-50 hours and more than 50 hours. The respondents worked less than 40 hours per week in the sample displayed the lowest value (Mean = 3.40, S.D.= .97) about work-family conflict while worked more than 50 hours the highest (Mean = 4.01, S.D.= 1.10) with 40-50 hours in the middle (Mean = 3.68, S.D.= 1.07), showing the trend of higher weekly working hours, higher work-family conflict. However, significance differences only exist the respondents who worked less than 40 hours and 40-50 hours, as well as worked less than 40 hours and more than 50 hours while there is no significant difference between the groups of respondents worked 40-50 hours and more than 50 hours.

4.6 Hypothesis Testing

We use regression analysis to examine the mediation relationship according to the method of Baron and Kenny (1986). The first three hypotheses were analysed to approve the following relationships: First, there is a significant connection between the predictor (in this case emotional dissonance) and the mediator (work-family conflicts). Second, the predictor is associated with the outcome (emotional exhaustion). Finally, there is a connection between the mediator, work-family conflict and the outcome variable, emotional exhaustion.

To test the hypothesis 1 that "*Emotional dissonance is positively related with emotional exhaustion*", we conducted a regression analysis to see if there is a significant relationship between emotional dissonance with emotional exhaustion.

Table 12 Regression Analysis - Hypothesis 1

Independent variable	Emotional Exhaustion (Dependent variable)				
	R	R ²	t	β	Sig.
Emotional Dissonance	.290	.081	5.489	.290	.000

Note: R² = Adjusted R²

As indicated in Table 12, emotional dissonance is significantly associated with

emotional exhaustion with an adjusted explained variance of 8.1% ($\beta=.290$, $p<.001$). Therefore, hypothesis 1 is fully supported.

For hypothesis 2 “*Emotional dissonance is positively related with work-family conflict*”, the dependent variable, work-family conflict was regressed on emotional dissonance and generated the following results.

Table 13 Regression Analysis - Hypothesis 2

Independent variable	Work-family Conflict (Dependent variable)				
	R	R ²	t	β	Sig.
Emotional Dissonance	.298	.086	5.661	.298	.000

Note: R² = Adjusted R²

As indicated in the Table 13, emotional dissonance is significantly connected with work-family conflict with an adjusted explained variance of 8.6% ($\beta=.298$, $p<.001$). Therefore, hypothesis 2 is fully supported.

In order to test hypothesis 3 that “*Work-family conflict is positively related with emotional exhaustion*”, we conducted a similar regression analysis to see if there is a significant relationship between work-family conflict with emotional exhaustion.

Table 14 Regression Analysis - Hypothesis 3

Independent variable	Emotional Exhaustion (Dependent variable)				
	R	R ²	t	β	Sig.
Work-family Conflict	.521	.269	11.043	.521	.000

Note: R² = Adjusted R²

As showed in Table 14, work-family conflict is significantly connected with emotional exhaustion with an adjusted explained variance of 26.9% ($\beta=.521$, $p<.001$).

Therefore, hypothesis 3 is fully supported.

These three relationships were clearly demonstrated in the above results that are fulfilled as preconditions for mediation analysis (Baron and Kenny, 1986). In the fourth step, we conducted a regression analysis to test the last hypothesis (4) that “*Work–family conflict will mediate the association between emotional dissonance and emotional exhaustion*”.

Table 15 Regression Analysis - Hypothesis 4

Independent variables	Emotional Exhaustion(Dependent variable)				
	R	R ²	t	β	Sig
Emotional Dissonance	.539	.287	3.031	.148	.003
Work-family Conflict			9.766	.476	.000

Note: R² = Adjusted R²

As shown in Table 15, the model containing emotional dissonance and work-family conflict explained variance of 28.7% of the variance in emotional exhaustion. Of the two variables, work-family conflict produced the largest unique contribution ($\beta = .476$, $p < .001$), although the emotional dissonance also produced a statistically significant contribution ($\beta = .148$, $.001 < p < .05$). As can be seen from Figure 2, the direct effect without including mediator in brackets is .290. It drops from .290 to .148 with the effect of the mediator (work-family conflict). In addition, the Sobel-test showed that work-family conflict ($z = 4.66$, $p < .01$) is a significant mediator of emotional dissonance on emotional exhaustion. In conclusion, the work-family conflict appears to partially mediate the association between emotional dissonance and emotional exhaustion among the respondents surveyed in this research. Therefore, we support the hypothesis that “*Work–family conflict will mediate the association between emotional dissonance and emotional exhaustion*”.

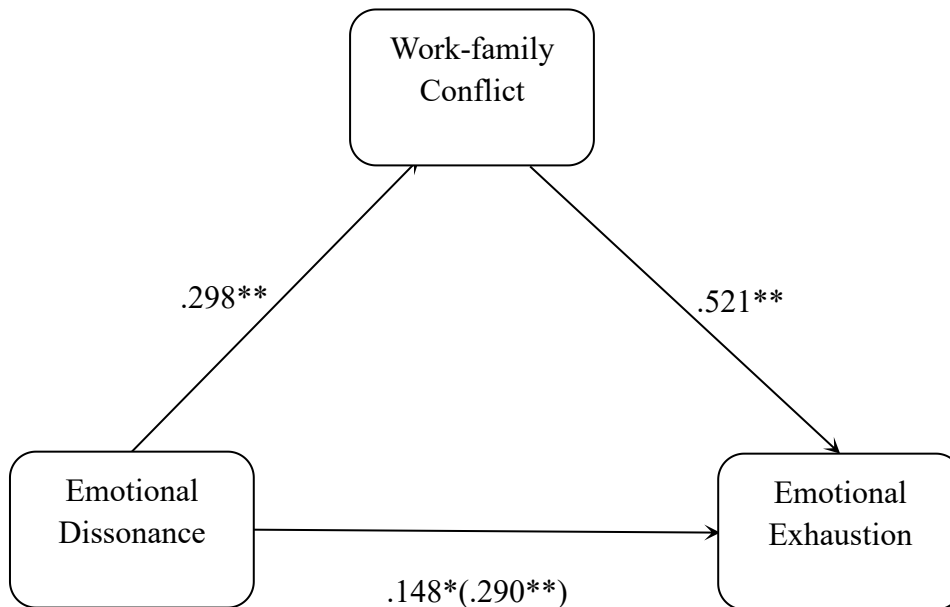


Figure 2. ED and EE Model with WFC as a mediator

Notes: All numbers represent standardized beta coefficients (numbers in brackets are direct effects without including mediator); * $p < 0.05$; ** $p < 0.001$

Chapter 5 Discussion and Conclusions

5.1 Discussion

In our study, we investigated the association of emotional exhaustion, emotional dissonance and work-family conflict among Chinese college teachers. In addition, we also explored the different performance of these variables when college teachers had different highest educational level, number of dependents, university type and weekly working hours. Okeke and Dlamini (2013) argued that teachers often encounter high demands in the teaching environment, including time pressure and heavy workload, ambiguity and role conflict, complicated school relationships and parental and social pressure and criticism. These findings have contributed to our in-depth understanding of the current social situation of college teachers. With regard to the relationship between the three variables, we first tested the relationship between emotional dissonance and emotional exhaustion; then tested emotional dissonance and work-family conflict; emotional exhaustion and work-family conflict. Subsequently, we examined the mediating effects of work-family conflict on the relationship between emotional exhaustion and emotional dissonance. The results are discussed below.

This research reveals that college teachers respondents suffer a high level of emotional dissonance (mean=3.3, S.D. = 0.96) and work-family conflict (mean=3.62, S.D. =1.05). Indeed, compared with other occupations home and abroad, the college teachers respondents in this study suffer higher work-family conflict. For example, Annink et al.'s study (2016) of 6,192 European self-employed and employees reported work-family conflict with a mean of 2.30 in a scale of 5, which is lower than that of Chinese college teachers reported in this study. And the level of work-family conflict in Chinese college teachers is the same with the level of work-family conflict (Mean=3.62 with a scale of 6) in Chinese civil servants surveyed in Huang's study

(2017). The emotional dissonance of Chinese college teachers (mean=3.33 with a scale of 6) is lower than the American service workers (mean=2.95 with a scale of 5) reported in (Allen et al., 2014). Lastly, The emotional exhaustion of Chinese college teachers (mean=3.03, S.D. = 1.05) in this research is higher than that of Australian frontline police officers (mean = 2.10 with a scale of 7) in Hall et al.'s study (2010) .

The study demonstrated that on educational level of Chinese college teachers there exists significant difference with emotional dissonance - the lower the educational level, the higher the emotional dissonance. Teachers with lower educational level experienced more emotional dissonance, since they need to please students for gaining good appraisal in student evaluation, so that they can obtain a stable salary. We can infer that when teachers' education level is not enough, teachers try to expand their positive performance to improve their teaching effectiveness (Sutton et al., 2009; Sutton, 2004). Also the greater the number of dependents (parents and children), the greater the degree of emotional dissonance in the group of college teachers. It is worth noting that the high number of dependents may affect the teacher's time to coordinate work and family, but regarding the number of dependents, there is no significant difference on the level of work-family conflict. Because the elder people may be in support to take care for offspring, thereby reducing the severity of work-family conflict. As Jingxiong et al. (2007) indicated that grandparents were the main caregivers of children in three-generation families.

In our research, it was also found that the university type is significantly related to emotional dissonance. Teachers in higher vocational colleges showed the highest level of emotional dissonance, followed by Tier-1 universities, while Tier-2 or Tier-3 Universities have the lowest emotional dissonance. Empirical research shows that in higher education, teaching is also experience emotionally (Hagenauer & Volet, 2014; Postareff & Lindblom-Ylänne, 2011) and is related to teaching quality indicators (e.g. student-centered teaching) (Trigwell, 2012). This phenomenon may be caused by the fact that the graduating students without work experience are the main sources of

teacher in higher vocational colleges (Zhang, 2018). In the initial stage of entering the teacher industry, due to the limitations of experience and experience, many students are not able to adapt to the change of identity and role, and are forced to quickly enter the teacher status (Zhang, 2018). The problems in the higher vocational colleges include the existence of more low quality students, and the excessive workload and lack of support from universities. The requirements and pressures from the public to the Tier-1 universities are greater, so the teachers also show a certain level of emotional dissonance. The Tier-2 or Tier-3 Universities are relatively less socially stressed, so the level of emotional dissonance is not so serious.

The weekly working hours are significantly associated with emotional exhaustion and work-family conflict, and the longer the time, the higher level of the emotional exhaustion and work-family conflict. Since the longer the work time, the heavier the workload, the more serious the emotional exhaustion. And long working hours will also take up the time spent on family affairs, so the work-family conflict is even more serious. Many factors may be related to teacher burnout. According to the Job Demand-Resources Model of Bakker and Demerouti (2007), burnout is associated with both low job resources (e.g. social support) and high job demands (e.g. workload).

Our findings in this study fully supported Hypothesis 1. There was a significant positive correlation between emotional dissonance and emotional exhaustion. Specifically, respondents in this research reported that significantly higher emotional dissonance were related to higher emotional exhaustion. It supports the view of Karatepe and Choubtarash (2014) that emotional dissonance lead to emotional exhaustion. Emotional dissonance made staffs in a condition of nervous and strongly predicts burnout. This can be explained by the study of Jansz and Timmers (2002), the fact that emotional dissonance represents a threat to personal identities to reduce the likelihood of spontaneous expression of emotions and require more regulation strategies. Besides, surface acting increases emotional dissonance, which in turn

caused emotional exhaustion (a main component of burnout) (Grandey, 2003). Our research shows that college teachers experience differences or inconsistencies between feelings and displayed emotions (for instance, teachers are angry with students, but must pretend and do not express anger as part of the job role), and this emotional dissonance has been proven to be related to burnout (Karatepe & Choubtarash, 2014). Therefore, the results of this study emphasize emotional dissonance can make a series of serious consequences including emotional exhaustion.

According to the hypothesis 2, our sample reported a significant relationship between emotional dissonance and work-family conflicts. It was indicated that college teachers with higher emotional dissonance were associated with higher work-family conflict. From previous literature reviews, we know that surface acting was a significant predictor of WFC (eg, Montgomery et al., 2006; Yanchus et al., 2010). Based on these previous research results (eg, Kinman, 2009; Montgomery et al., 2005; Montgomery et al., 2006; Seery et al., 2008; Yanchus et al., 2010), evidence has been provided that staffs who usually engage in surface acting (faking and suppressing emotions) have more work-family conflict. Karim (2009) argued that the emotional dissonance has significant implication for strained-based conflicts. The hypothesis H2 is fully supported in this research. This was consistent with previous theory that emotional dissonance were positively associated with work-family conflict (Nancy et al., 2010).

In our hypothesis 3, we examined the relationship between work-family conflict and emotional exhaustion. The results showed a significant positive correlation between work-family conflict and emotional exhaustion. This hypothesis was supported in this research. As the literature review points out, work-family conflict has an effect on emotional exhaustion (Vignoli et al., 2016). For instance, work-family conflict has the impact on emotional dissonance for staffs in the Chinese electronics industry (Yu et al., 2010). Work-family conflict has been found related to burnout (Netemeyer et al., 1996). Our results confirm the simultaneous reciprocal associations between

work-family conflict and emotional exhaustion (Rubio et al., 2015). The study of Westman et al., (2008) also show that work - family conflict and job burnout were interactive. The work-family conflict may in turn cause emotional exhaustion because resources are lost in the procedure of handling work and family roles (Ahmad, 2010).

The hypothesis 4 of our research examined the mediating role of work-family conflict between emotional exhaustion and emotional dissonance. We found that under the influence of work-family conflict, the significant association between emotional exhaustion and emotional dissonance was partially changed when compared with the situation without the effect of work-family conflict. This finding supports the hypothesis that work-family conflict partially mediates the association between emotional exhaustion and emotional dissonance on Chinese college teachers. The results indicated that one pathway in which emotional dissonance affect emotional exhaustion was through work-family conflict. This is consistent with previous study of Noor and Zainuddin (2011) that one pathway by which surface acting affects job burnout is through work-family conflict. For instance, these female teachers who combined work and family responsibilities experienced a high surface acting due to the need to constantly adjust their emotions, which in turn led them to report more work-family conflict, and resulting in emotional exhaustion (Noor & Zainuddin, 2011).

The mediation model was developed based on the theory of Conservation of Resources (COR) (Barnett & Hyde, 2001) and the work of previous studies. The core idea of the COR theory is that individuals with more resources are less vulnerable to resource loss and more capable of accessing resources. When faced with resource losses, individuals tend to take action first to prevent continued loss of resources to reduce losses. Resource-related factors can support individual values, thereby alleviating the stress of negative emotions. The loss of these resources can also lead to work-family conflicts (Aminah, 2010). And Job burnout occurs when emotional regulation leads to resource imbalances.

From the report of Aminah (2010), work-family conflict partially mediated the impacts of role overburden on emotional exhaustion. For instance, junior doctors who have experienced role overburden seem to be more emotionally consuming and seem to experience higher conflict between work and family roles (Ahmad, 2010). And In our study, we found that work-family conflict partially mediated the association between emotional exhaustion and emotional dissonance. The cause may be that although the emotional dissonance lead to emotional exhaustion during work time. However, when the conflict between work and family intensifies, the emotional dissonance expressed at work is partly shifted and the center of gravity is removed from work to family, making the emotional exhaustion at work less severe.

In addition, when employees experience work conflicts, they will consume and occupy family life time, roles, behaviors, emotions and other resources to deal with conflicts, so their interpersonal promotion, work dedication, task performance and job performance are improved, so work-family conflict has a significant positive impact on them (Zhao et al., 2016). The occurrence of work-family conflicts allows teachers to make full use of family time and resources, help emotional regulation, and make up for the imbalance of resources, thus partially alleviating the impact of emotional dissonance on emotional exhaustion.

5.2 Implications for Management

This study indicated that the Chinese college teachers have a high degree of emotional exhaustion, emotional dissonance and work-family conflict. The result made a significance for our attention on teachers' psychological health and the coordination of their work and family. Because of Chinese special culture, the public are very concerned about their children and pays more attention to the education of the offspring. Which made teachers suffered more pressures of multidimensional excessive monitoring from various objects (e.g. parents and society and network

public opinion), then lead to higher emotional dissonance and emotional exhaustion at work.

However, Chinese educators only emphasized the students' emotional labor development (Chan, 2004). As the report of Yin and Lee (2012) concluded that work-related emotional management training in teacher education programs was inadequate, and Chinese schools rarely provided counseling services to teachers to help them cope with emotional problems (e.g. depression and anxiety). In order to improve the situation, management should give support and help teachers build psycho-assisted training at irregular times to help teachers with emotional adjustment problems. At the same time, they can make reasonable allocation of teaching time for college teachers, improve holiday benefits and reduce their workload to reduce the symptoms of emotional exhaustion.

The universities should respect the personality of teachers and their reasonable needs, and give teachers more professional autonomy and greater freedom. Teachers can independently choose teaching methods, teaching books, and organize classroom teaching according to their needs, so as to regain their enthusiasm for work and reduce emotional exhaustion. The administrators of colleges can improve the teacher appointment system, job title promotion system, performance management and salary, welfare system to motivate teachers.

In addition, different type of universities can implement different management principles. Because Tier-1 universities and higher vocational colleges suffered from higher level of emotional dissonance, they can make training of emotional regulation and management on teachers. Additionally, higher vocational colleges can strengthen the cooperative relationships with various companies and provide more job opportunities for students so as to reduce the psychological burden of college teachers on their future career plans for students. Tier-1 universities need to appropriately reduce excessive demands and standards on teachers in order to ease their pressure.

And Abraham (1998) proposed two ways to reduce dissonance, including awarding greater job autonomy and encouraging social support.

Finally, in order to reduce the work-family conflict of college teachers, the administrator can set up a child-care center for teachers' children or provide teaching benefits, and provide teachers with preferential housing policies near the university to assist in alleviating their economic burden. Managers can also take measures to improve the efficiency and quality of training for internship teachers so that they can share responsibility for work of formal teachers earlier or offer more vacations and arrange flexible working time.

5.3 Conclusions

The significant purposes of this study include investigating the relationship among emotional dissonance, emotional exhaustion and work-family conflict experienced by Chinese college teachers and figuring out whether work-family conflict plays a special role in the relationship between emotional exhaustion and emotional dissonance. The results show that emotional exhaustion, emotional dissonance and work-family conflict have a mutual significant relationship. Besides, emotional dissonance has positive relationship with emotional exhaustion and work - family conflict respectively. The findings support the previous studies that work - family conflict is positively related to emotional exhaustion. The results of this study also show that the work-family conflict partially mediates the relationship between emotional exhaustion and emotional dissonance.

5.4 Limitation and Further Studies

There are several limitations in this research. First of all, we collected the data of

college teachers most from southern China, and mainly in the second and Tier-2 or Tier-3 universities and higher vocational colleges. Therefore, the representativeness of the research sample is limited. In addition, the sample is mainly composed of college teachers with academic degrees below doctor degree. Therefore, further research should consider the collection of more college teachers with doctor degrees or college teachers from Tier-1 universities.

The direction of future researches can be extended to the emotional dissonance that college teachers and colleagues generate during competition or cooperation. Besides, future studies can focus on whether it is the teaching process or research evaluation process of college teachers that affects the level of work-family conflict. Second, due to the cross-sectional data, this study was influenced by the possible effects of reaction bias and it was impossible to draw conclusions about the direction of causality. Future researches need to focus on longitudinal studies to test the random direction.

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Appendix: Questionnaire

This questionnaire is an academic study of college teachers. There is no right or wrong answers and all data will be kept secret strictly. In the next few pages, you will find several different kinds of issues. Specific instructions will be given at the beginning of each section. Please answer each item as honestly and frankly as possible. The entire questionnaire should not exceed 15 minutes to be completed. Thank you for your support and kindly help!

I. Instructions for completing this survey

The survey consists of four sections. There will be one instruction at the beginning of each section. Follow the instructions to choose the answer.

A. EMOTIONAL DISSONANCE						
Instruction: When interacting with your students, how often do you actually do the following behavior during a typical work day.	Never/ Not at all	Nearly never	Rarely/ Once in a while	Some- times	Often	Always/ Constantly
1. You have to suppress emotions in order to appear “neutral” on the outside.	1	2	3	4	5	6
2. You have to display emotions that do not agree with your actual feelings towards the students.	1	2	3	4	5	6
3. You have to display pleasant emotions (i.e. friendliness) or unpleasant emotions (i.e. strictness) on the outside while actually feeling indifferent inside.	1	2	3	4	5	6

4. You have to display emotions that do not agree with your true feelings.	1	2	3	4	5	6
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B. WORK-FAMILY CONFLICT						
Introduction: To what extent do you agree or disagree?	Strongly disagree	Disagree	Some-what disagree	Some-what agree	Agree	Strongly agree
1. The demands of my work interfere with my home and family life.	1	2	3	4	5	6
2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.	1	2	3	4	5	6
3. Things I want to do at home do not get done because of the demands my job puts on me.	1	2	3	4	5	6
4. My job produces strain that makes it difficult to fulfill family duties.	1	2	3	4	5	6
5. Due to work-related duties, I have to make changes to my plans for family activities.	1	2	3	4	5	6

C. EMOTIONAL EXHAUSTION						
Introduction: Choose an answer that best describe yourself	Never/ Not at all	Very few	Rarely/ Once in a while	Several times a month	Several times a week	Almost everyday
1. I feel emotionally drained from my work.	1	2	3	4	5	6
2. I feel fatigued when I get up in the morning and have to face another day on the job.	1	2	3	4	5	6
3. Working with people all day is really a strain for me.	1	2	3	4	5	6
4. I feel used up at the work day.	1	2	3	4	5	6
5. I feel like I'm at the end of my rope.	1	2	3	4	5	6

II. Respondent's information

1. Gender : Male Female
2. Age : ≤ 30 years old
 31-40 years old
 ≥ 41 years old
3. Marital status : Single
 Married
 Others (divorce, etc)
4. Job Category : Teacher
 Administration staff
5. Highest Educational Level : Bachelor degree or below
 Master degree
 Doctor degree
6. University Type : Tier-1 Universities
 Tier-2 or Tier-3 Universities
 Higher vocational Colleges
7. Number of Offspring 0
 1
 2
 3 and above
8. Number of Dependents 0
 1
 2
 3 and above
9. Professional Tenure : < 3 years
 3-10 years
 > 10 years
10. Weekly Working Hours < 40 hours
 40-50 hours
 > 50 hours