

OPEN ACCESS



Educational Research and Reviews

September, 2023
ISSN: 1990-3839
DOI: 10.5897/ERR
www.academicjournals.org



**ACADEMIC
JOURNALS**
expand your knowledge

About ERR

Educational Research and Reviews (ISSN 1990-3839) is published bi-monthly (one volume per year) by Academic Journals.

Educational Research and Reviews (ERR) is an open access journal that publishes high-quality solicited and unsolicited articles, in English, in all areas of education including education policies and management such as Educational experiences and mental health, the effect of land tenure system on resource management, Visualization skills and their incorporation into school curriculum, Gender, education and child labour etc. All articles published in ERR are peer-reviewed.

Contact Us

Editorial Office: err@academicjournals.org

Help Desk: helpdesk@academicjournals.org

Website: <http://www.academicjournals.org/journal/ERR>

Submit manuscript online <http://ms.academicjournals.me/>.

Editors

Dr. Peter W. Wong

*Southern Cross University
Australia.*

Assoc. Prof. Manjula Vithanapathirana

*Faculty of Education
University of Colombo
Colombo,
Sri Lanka.*

Associate Editors

Dr. Melissa Vick

*School Of Education
James Cook University
Townsville,
Australia.*

Dr. Ahmet Basal

*Yıldız Technical University
Education Faculty
Foreign Languages Education Department
İstanbul,
Turkey.*

Dr. Maniam Kaliannan

*Faculty of Administrative Science & Policy Studies
Universiti Teknologi MARA (UiTM)
Selangor,
Malaysia.*

Prof. Ogunsakin R. Ebenezer

*Department of Statistics
Ekiti State University
Ado Ekiti,
Nigeria.*

Dr. Tavis D. Jules

*Cultural and Educational Policy Studies
School of Education
Loyola University Chicago
Chicago,
USA.*

Dr. A. Kadir Maskan

*Dicle University
Ziya Gokalp Education Faculty
Department of Physics Education
Diyarbakir,
Turkey.*

Dr. Adams Onuka

*Centre for Peace and conflict Studies (CEPACS)
University of Ibadan
Nigeria.*

Dr. Mohd Akhtar Siddiqui

*Institute of Advanced Studies in Education
Faculty of Education
Jamia Millia Islamia Central University
New Delhi,
India.*

Dr. Yambo John M. Onyango

*University of Eastern Africa
Kamagambo Adventist College Campus
Baraton,
Kenya.*

Dr. Tolga Gök

*Torbali Vocational School of Higher Education
Dokuz Eylul University
Izmir,
Turkey.*

Editorial Board

Prof. García Mayo, María del Pilar

*Departamento de Filología Inglesa y Alemana y de Traducción e Interpretación
Universidad del País Vasco (UPV/EHU)
Paseo de la Universidad 5
Vitoria,
Spain.*

Prof. Frank Witlox

*Ghent University
Department of Geography
Gent,
Belgium.*

Prof. Georgios D. Sideridis

*University of Crete
Department of Psychology
Rethimno,
Greece.*

Prof. Andreas Veglis

*Department of Journalism and Mass Media
Aristotle University of Thessaloniki
Thessaloniki,
Greece.*

Prof. Mutendwahothe Walter Lumadi

*Curriculum & Instructional Studies
College of Education
UNISA,
South Africa.*

Dr. Miriam McMullan

*Faculty of Health and Social Work
University of Plymouth
Plymouth,
UK.*

Prof. Moshe Barak

*Graduate Program for Science and Technology
Education
Ben-Gurion University of the Negev,
Beer Sheva,
Israel.*

Dr. Hiam Zein

*Psychology and Education
Lebanese American University
Chouran-Beirut,
Lebanon.*

Dr. Joel O. Eriba

*Faculty of Education
Benue State University
Makurdi,
Nigeria.*

Prof. Bingjun Yang

*School of Foreign Languages
Southwest University
Chongqing,
China.*

Dr. Ernest W. Brewer

*The University of Tennessee
Educational Administration and Supervision
Tennessee,
USA.*

Prof. Gail Derrick

*Regent University
School of Education
Virginia Beach,
USA.*

Dr. Evridiki Zachopoulou

*Department of Early Childhood Care and Education
Thessaloniki,
Greece.*

Dr. Francesco Pastore

*Seconda Università di Napoli
Italy,*

Dr. Syed Iftikhar Hussain Shah

*Technical Education and Vocation
TEVTA Secretariat
Lahore,
Pakistan.*

Dr. Ravi Kant

*College of Teacher Education
Maulana Azad National Urdu University
Darbhanga,
India.*

Editorial Board

Dr. Dibakar Sarangi

*Directorate of Teacher Education and State Council
for Educational Research and Training
(DTE & SCERT)
Odisha,
India.*

Dr. Elisa Backer

*Faculty of Business
Federation University Australia
Australia.*

Dr. Ahmad Alkhaldeh

*Department of Curriculum and instruction
University of Jordan
Jordan.*

Dr. Mehmet Akif Sözer

*Department of Primary Education
Gazi Faculty of Education
Gazi University
Turkey.*

Table of Content

The relationship between work-family conflict and job satisfaction of female university teachers in China: A moderated mediating model Qiaolan Su ^{1,2} and Man Jiang ^{1*}	225-233
Comparison of career adapt-abilities of students from faculty of education with emotional intelligence levels Meşhude Şentürk, Oğuzhan Kırdök and Oğuzhan Çolakkadioğlu*	234-240
Research on metacognition and innovation behavior of vocational college students in Hainan Ling Pan ^{1,2} and Yuan-Cheng Chang ^{1*}	241-246
Becoming a dreamcatcher: Pre-service EFL teachers' experience of culturally relevant pedagogy as agents of flexibility Esin Kumlu	247-259

Full Length Research Paper

The relationship between work-family conflict and job satisfaction of female university teachers in China: A moderated mediating model

Qiaolan Su^{1,2} and Man Jiang^{1*}

¹Chinese International College, Dhurakij Pundit University, Bangkok, Thailand.

²School of Tourism and Sport Health, Hezhou University, Hezhou, China.

Received 14 March, 2023; Accepted 4 July, 2023

Work and family are two of the most important parts in one's life. Individuals cannot fulfill their work requirements and family responsibilities at the same time, so they are faced with the dilemma of timing and role conflict. Based on the conservation theory, this study explored the relationship between work-family conflict and job satisfaction in 422 female university teachers in China, and proposed a moderating mediation model to examine the mediating role of job burnout and the moderating role of perceived organizational support. The results show that work-family conflict has a significant negative predictive effect on job satisfaction; job burnout fully mediates the relationship between work-family conflict and job satisfaction; perceived organizational support moderates the relationship between work-family conflict and job burnout, and the stronger the perceived organizational support, the weaker the negative predictive effect of work-family conflicts on job satisfaction.

Key words: Work-family conflict; job satisfaction; job burnout; perceived organizational support.

INTRODUCTION

In recent years, with the continuous advancement of education reform, China's higher education system has also put forward higher requirements for college teachers, which makes college teachers, have to devote a lot of time and energy to teaching, research and management (Wang et al., 2019). However, influenced by traditional social gender concepts and limited personal energy, female teachers in colleges not only need to take responsibility for teaching and educating, but also need to devote a lot of time to family construction (such as

housework, child-rearing, filial piety, etc.) (Allen et al., 2013). As a result, female teachers in colleges face higher role conflict, which means that they need to try to balance the conflict between work and family (Lin et al., 2022). Work-family conflict, as an important form of inter-role conflict, refers to the fact that an individual's role at work (or at home) makes it difficult for him to play his role at home (or at work). Or the role requirements in one field interfere with the execution of roles in another field (Erdamar and Demirel, 2014), and excessive work-family

*Corresponding author. E-mail: m.jiang125@gmail.com.

conflict level will seriously damage the physical and mental health of individuals and weaken work motivation (Allen et al., 2000; Netemeyer, 1996). Many scholars have paid attention to the relationship between work-family conflict and job satisfaction of female college teachers. However, studies analyzing the internal mechanism of the relationship between the two are scarce.

Therefore, this study uses an online questionnaire survey to investigate female teachers in some colleges in China so as to further explore the relationship between work-family conflict and job satisfaction of female college teachers and its internal mechanism (the mediating role of job burnout and the moderating role of perceived organizational support), and intends to provide targeted suggestions and measures to improve the job satisfaction of female teachers in colleges by constructing a moderating mediation model.

Research hypothesis

Theoretical deduction

Conservation of Resources (COR) was put forward by Hobfoll (1989). The basic assumption of COR theory is that individuals always try their best to obtain new resources and preserve existing resources. Resources include two aspects; on the one hand, they are mainly material resources. Including rights, remuneration, time, etc.; On the other hand, it is character resources, including self-esteem, efficacy and so on (Hobfoll et al., 2018). When female university teachers are faced with high-intensity work that takes up too much time, which hinders them from fulfilling their family obligations, or when they are unable to complete their work with due diligence because of too many family affairs, it is easy to lead to two-way conflicts between work and family (Hobfoll, 2011). At this time, female university teachers need to mobilize their existing personal resources and self-control resources to deal with various problems brought about by the conflict. If female university teachers frequently organize or self-intervene in order to improve their work or life, it will eventually lead to negative emotions and job dissatisfaction. However, if the organization provides some material help or spiritual support to female university teachers, it can greatly reduce the adverse physical or psychological effects of female university teachers caused by stress, and alleviate the negative consequences of female university teachers such as job burnout or stress caused by resource depletion (Tran, 2022).

Work-family conflict and job satisfaction

Work-family conflict is a kind of role conflict from the field

of work and family life, that is to say, because of participating in family (work) activities, the role and time become more difficult (Panda et al., 2022). Work-family conflict is bidirectional, that is, work interferes with family or family interferes with work. Work-family interference is due to excessive work affairs, which makes it difficult for individuals to fulfill their family responsibilities and obligations, while family interference with work is due to family needs, which affects work. The two are a conflict relationship caused by the imbalance between work and family (Lim et al., 2021). A large number of studies have confirmed that work-family conflict is associated with a variety of negative outcome variables in the work and family domains, such as turnover intention, reduced work and life satisfaction, and depressive symptoms (Torp et al., 2018). The conflict of family life brought by work will reduce the level of individual's devotion to work and job satisfaction, that is, work-family conflict will negatively affect individual's job satisfaction (Mumu et al., 2021). The analysis also shows that work-family conflict is an effective factor to predict individual job satisfaction (Selvarajan et al., 2019).

Most scholars believe that there is a correlation between work-family conflict and job satisfaction, and some scholars study the relationship between work-family conflict and job satisfaction as a whole (Panda et al., 2022). Work-family conflict and family-work conflict are negatively correlated with job satisfaction. The study shows that there is a negative correlation between family-work conflict and job satisfaction, and the more attention teachers' pay to work and family, the lower their job satisfaction (Mumu, et al., 2021). There is a significant correlation between behavioral conflict and job satisfaction (Dodanwala and Shrestha, 2021). Therefore, this study infers that the higher the level of work-family conflict of female university teachers, the lower their job satisfaction. Therefore, the following hypotheses are proposed in this study:

H1: The work-family conflict of female university teachers in China has a significant negative impact on job satisfaction.

Mediating effect of job burnout

Work-family conflict may affect job satisfaction through specific ways. Job burnout, as an extreme psychological state of individuals, also known as job burnout, refers to the physical and psychological state of individuals who are physically and mentally exhausted, tired of work, depressed, creative exhaustion, reduced sense of value and unable to release their potential (Madigan and Kim, 2021). It mainly includes three dimensions: emotional exhaustion, dehumanization and low sense of accomplishment (Maslach and Jackson, 1981). Specifically, emotional exhaustion refers to the individual

in a state of extreme fatigue, loss of enthusiasm for work, lack of vitality; De-humanization refers to treating the working object with a cold, negative, distant, negative and insensitive attitude in the work. Low sense of achievement refers to the individual's reduced tendency to evaluate the meaning and value of self (Wang and Hu, 2012). This negative emotional state reflects the individual's view of work, which affects the individual's job satisfaction.

It is found that job burnout is directly related to job satisfaction. Evidence from cross-sectional studies shows that job burnout is associated with absenteeism, turnover, low productivity, low job satisfaction, and low job engagement (Golembiewski et al., 1987), in other words, there is a significant negative correlation between job burnout and job satisfaction, which means that the higher the job burnout is, the lower the job satisfaction will be (Visser et al., 2003).

Through a one-year survey of junior high school teachers, Li (2019) found that job burnout was a significant predictor of teachers' perceived higher workload and reached the same conclusion as Visser. Similarly, Abate et al. (2018) also found that job burnout is a longitudinal factor predicting individual job satisfaction. In this regard, the job demand-resource model (JD-R) points out that higher job burnout will lead to the increase of individual's job stress, resulting in the loss of psychological resources, which will affect individual's motivation and behavior, and ultimately lead to the decline of self-efficacy, disengagement from work, and lower job satisfaction (Bakker et al., 2003). In addition, other studies have found that work-family conflict is closely related to job burnout. The results show that work-family conflict can lead to job burnout, which will make employees have negative emotions and affect their work efficiency, and low work efficiency will in turn lead to higher work-family conflict and job burnout, thus forming a vicious circle (Bakker et al., 2003). The cross-influence model proposed by Frone et al. (1992) holds that work-family conflict will cause psychological distress in the field of work and life, resulting in anxiety, depression, fatigue, incompetence and other feelings, while persistent negative emotions will cause emotional exhaustion. According to the theory of resource conservation, when employees are faced with conflicts between work and family, they will feel the depletion of physical, emotional and psychological resources (Wei and Ni, 2020). If they do not take actions to protect or reset these resources, job burnout will occur (Hobfoll, 1989; Wright and Cropanzano, 1998), thereby reducing individual job satisfaction (Abate, et al., 2018). To sum up, job burnout is likely to be the key variable of work-family conflict affecting job satisfaction. Based on this, this study assumes that job burnout is a mediating variable between work-family conflict and job satisfaction.

H2: Job burnout plays a mediating role in the negative

impact of work-family conflict on job satisfaction.

Moderating effect of perceived organizational support

A good organization is an important driving force to support individual development. Perceived organizational support refers to an individual's overall view of the organization's emphasis on his own contribution and concern for his well-being (Kurtessis et al., 2017). According to the theory of resource conservation, when people face stressful events, they will mobilize resources to improve the situation, thus offsetting the continuing challenges and reducing the negative impact of stress (Eisenberger et al., 2020). The loss or acquisition of resources is an important mechanism driving the stress response. Therefore, when the school's work requirements for teachers are too high or the work resources do not match the work requirements, the work pressure of teachers will be greater, resulting in work tension, negative idleness and other symptoms (Ferreira et al., 2019). But at this time, if the organization can provide some material help or spiritual support to employees, it can greatly reduce the physical or psychological adverse effects of stress on employees (Yew and Ramos, 2019). Supervisor support can greatly reduce the level of job burnout, especially in the two sub-dimensions of emotional exhaustion and depersonalization of job burnout. Previous studies have shown that perceived organizational support is beneficial to reduce the degree of job burnout (Kelly et al., 2021). Perceived organizational support is a buffer of stress, the individuals who feel emotional and material support are healthier than those who feel less support, perceived organizational support has a significant impact on job burnout, and the individuals who feel perceived organizational support are less likely to be emotionally exhausted (Shen et al., 2014).

Similar studies have also found that a high degree of organizational help and support is effective in alleviating teachers' job stress and job burnout, and teachers working in a supportive environment generally produce less job burnout (Sari and Seniati, 2020). Perceived organizational support belongs to the category of resources. When individuals feel the perceived organizational support, it increases the value of resources, causes positive emotions, alleviates emotional exhaustion, and thus regulates the relationship between family-work conflict and job burnout (Lin et al., 2022). Therefore, this study infers that perceived organizational support may moderate the relationship between work-family conflict and job burnout among female university teachers. Therefore, the following hypotheses are proposed in this study:

H3: Perceived organizational support moderates the relationship among work-family conflict, job burnout and

job satisfaction of Chinese female university teachers.

Based on the above discussion, this study constructed a mediation model with regulation. It mainly includes the following three purposes: First, to examine the predictive effect of work-family conflict on job satisfaction of female college teachers; Second, to investigate whether job burnout plays a mediating role in the relationship between work-family conflict and job satisfaction. Third, to investigate the moderating effect of perceived organizational support in the mediating model.

METHOD

Participants

This study used a convenient sampling method to conduct an online questionnaire survey among female college teachers in China. A total of 422 questionnaires were collected, and 410 valid questionnaires were retained, with an effective rate of 97.16%, excluding invalid questionnaires with too short answer time and obviously unreasonable answers. Among them, there were 127 people under 30 years old, accounting for 31%, 228 people between 30 and 40 years old, accounting for 55.6%, 47 people between 41 and 50 years old and accounting for 11.5%, 8 people over 50 years old and accounting for 2%. About their fertility status: 77 (18.8%) people who had not yet given birth, 265 people who had one child (64.6%), 66 (16.1%) people who had two children and 2 (0.4%) people who had three children. There are 133 undergraduates, accounting for 32.4%, 216 masters, accounting for 52.7%, and 61 doctors, accounting for 14.9%. There are 51 people with ungraded professional titles, accounting for 12.4%, 192 people with junior professional titles, accounting for 46.8%, 109 people with intermediate professional titles and accounting for 26.6%, and 58 people with senior professional titles and accounting for 14.1%. There are 103 people with working life of less than 5 years, accounting for 25.1%, 213 people with working life of 5 to 10 years, accounting for 52%, 71 people with working time of 11 to 20 years and accounting for 17.3%, and 23 people with the working time of more than 20 years and accounting for 5.6%.

Tools

Work-family conflict scale

The Work-Family Conflict Scale (WFCS) developed by Netemeyer et al. (1996) was used to assess the extent of work-family conflict among female college teachers in China. The scale consists of 10 items, including two dimensions of work-family conflict and family-work conflict. Likert 5 points are used, ranging from "1" for "strongly disagree" to "5" for "strongly agree". The higher the score, the higher the work-family conflict. In this study, the Cronbach's alpha coefficient of the scale was 0.881, and the Cronbach's alpha coefficients of work-family conflict and family-work conflict were 0.871 and 0.812, respectively.

Job satisfaction scale

The Minnesota Job Satisfaction Questionnaire (Minnesota satisfaction questionnaire, MSQ) developed by Weiss et al. (1967) was used to evaluate the job satisfaction of female college teachers in China. The scale consists of 20 items, including three dimensions of intrinsic satisfaction, extrinsic satisfaction and general satisfaction. Likert 5 points are used, ranging from "1" for "very

dissatisfied" to "5" for "very satisfied". The higher scores indicate the higher job satisfaction. In this study, the Cronbach's alpha coefficient of the scale was 0.919, and the Cronbach's alpha coefficients of internal satisfaction and external satisfaction were 0.856 and 0.858, respectively.

Job burnout scale

Maslach and Jackson (1981)'s Job Burnout Inventory (maslach burnout inventory, MBI) was used to assess the job burnout of female college teachers in China. The scale consists of 15 items, including three dimensions of emotional exhaustion, depersonalization and low sense of accomplishment. Likert 5 points are used, ranging from "1" for "strongly disagree" to "5" for "strongly agree". The higher scores indicate the higher job burnout. In this study, the Cronbach's alpha coefficient of the scale was 0.888, and the Cronbach's alpha coefficients of emotional exhaustion, depersonalization and low sense of accomplishment were 0.891, 0.821 and 0.795, respectively.

Perceived organizational support scale

The perceived organizational support scale (POSS) developed by Settoon et al. (1996) was used to assess the perceived organizational support of female college teachers in China. The scale contains seven items. Likert 5 points were used, ranging from "1" for "strongly disagree" to "5" for "strongly agree". The higher scores indicate the greater sense of organizational support. The Cronbach's alpha coefficient of the scale in this study was 0.897.

Statistical processing

SPSS 25.0 and PROCESS statistical software were used for data entry and statistical analysis, and Pearson correlation analysis, Harman single factor test, mediating effect analysis and moderating effect analysis were used for statistical analysis.

RESULTS

Common method bias test

This study used a self-report questionnaire to collect data, and the results may be affected by common methodological bias. In order to minimize its impact, we have carried out program control in the process of data collection, such as anonymous testing and reverse scoring of some items. In addition, a Harman univariate test was performed in the subsequent data analysis to examine whether there was a common methodological bias problem (Zhou and Long, 2004). The results show that the eigenvalues of nine factors are greater than 1, and the explanation rate of the first factor is 17.549%, which is far below the critical standard of 40% (Podsakoff et al., 2003). Therefore, the common method bias in this study is not serious.

Correlation analysis

The results of descriptive statistics and correlation

Table 1. Statistical results and correlation analysis of each variable description ($N = 410$).

Variables	<i>M</i>	<i>SD</i>	1	2	3	4
1.Work-family conflict	26.539	7.904	1			
2.Job satisfaction	77.005	10.899	-0.365***	1		
3.Job burnout	33.532	9.205	0.552***	-0.730***	1	
4.Organizational support	25.649	5.117	-0.315***	0.853***	-0.670***	1

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$.

Source: Authors.

Table 2. Test of mediating effect of job burnout.

	Model 1: Job satisfaction		Model 2: Job burnout		Model 3: Job satisfaction	
	β	<i>t</i>	β	<i>t</i>	β	<i>t</i>
Age	-0.16	-2.23*	0.20	3.11**	-0.01	-0.20
Fertility	0.13	2.63**	-0.14	-3.18**	0.02	0.68
Education background	-0.08	-1.69	0.03	0.71	-0.06	-1.63
Professional title	0.03	0.43	-0.02	-0.41	0.01	0.22
Years of Working	-0.16	-2.28*	-0.01	-0.11	-0.16	-3.15**
Work-family conflict	-0.38	-8.47	0.56	13.60***	0.03	0.66
Job burnout					-0.73	-17.94***
R^2	0.21		0.34		0.56	
<i>F</i>	18.33**		35.31**		74.19**	

All variables in the model are standardized variables into the regression equation.

Source: Authors.

analysis of each variable are shown in Table 1. Work-family conflict is negatively correlated with job satisfaction and perceived organizational support, and positively correlated with job burnout. Job satisfaction was negatively correlated with job burnout and positively correlated with perceived organizational support. Job burnout was negatively correlated with perceived organizational support. Based on this, we will continue to examine the mediating role of job burnout in the relationship between work-family conflict and job satisfaction and the moderating role of perceived organizational support.

Testing the mediated mediation model

Firstly, the mediating effect of job burnout was tested by using Model 4 in SPSS Process plug-in provided by Hayes under the control of age, fertility, education, job title and working years. The results showed that (Table 2), work-family conflict did not significantly predict job satisfaction ($\beta = -0.38$, $p > 0.05$), work-family conflict significantly positively predicted job burnout ($\beta = 0.56$, $p < 0.001$), and job burnout significantly negatively predicted job satisfaction ($\beta = -0.73$, $p < 0.001$). The percentile Bootstrap method based on bias correction further found that job burnout played a full mediating role between work-family conflict and job satisfaction. According to

Wen Zhong lin's research method (Wen and Ye, 2014), a * B and C 'had different signs, and the effect was $|ab/C| = 15.14\%$.

Secondly, model 7 in Hayes procedure was used to test the moderating effect of perceived organizational support under the control of age, fertility, education, professional title and working years. The results showed (Table 3) that in Equation 1, job burnout significantly predicted job satisfaction ($\beta = -0.73$, $p < 0.001$). In Equation 2, the interaction between work-family conflict and perceived organizational support negatively predicted job burnout ($\beta = -0.08$, $p < 0.001$). Therefore, work-family conflict, job burnout, job satisfaction and perceived organizational support constitute a moderating mediating effect model.

Finally, to better interpret the mediated mediation model, a simple slope analysis was performed (Figure 2). Figure 1 indicates that work-family conflict significantly predicted job burnout in low perceived organizational support ($\beta = 0.04$, $t = 10.70$, $p < 0.001$) and job satisfaction in high perceived organizational support ($\beta = 0.04$, $t = 6.21$, $p < 0.001$).

DISCUSSION

This study systematically examined the relationship between work-family conflict and job satisfaction of female college teachers, and the specific ways of effects

Table 3. Moderated mediating effect test.

	Model 1: Job satisfaction				Model 2: Job burnout			
	β	SE	t	95% CI	β	SE	t	95% CI
Age	-0.02	0.08	-0.20	[-0.16,0.13]	0.14	0.07	1.89	[-0.01,0.28]
Fertility	0.04	0.06	0.68	[-0.08,0.15]	-0.11	0.06	-2.04*	[-0.22,0]
Education background	-0.09	0.05	-1.63	[-0.19,0.02]	-0.01	0.05	-0.22	[-0.11,-0.09]
Professional title	0.01	0.05	0.22	[-0.08,0.11]	-0.01	0.05	-0.24	[-0.10,0.08]
Years of Working	-0.20	0.06	-3.15**	[-0.32,-0.07]	-0.10	0.06	-1.72	[-0.22,0.01]
Work-family conflict X	0.03	0.04	0.66	[-0.05,0.11]	0.37	0.03	10.67**	[0.30,0.43]
Job burnout M	-0.73	0.04	-17.94***	[-0.81,-0.65]				
Organizational support U					-0.54	0.04	-15.15**	[-0.61,-0.47]
XU					-0.08	0.03	-3.03***	[-0.14,-0.03]
R^2			0.60				0.56	
F			74.02**				74.19**	

Source: Authors.

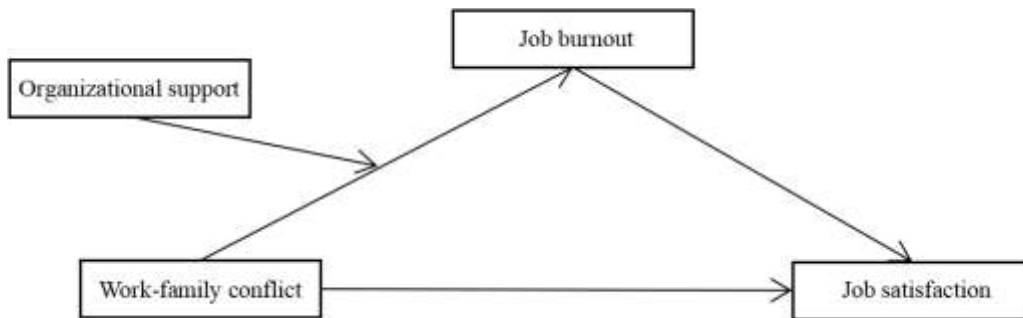


Figure 1. Hypothetical model.
Source: Authors.

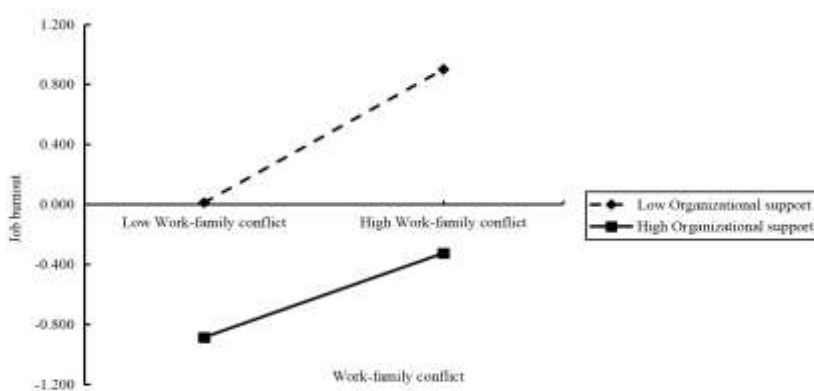


Figure 2. The moderating effect of perceived organizational support on the relationship between work-family conflict and job burnout.
Source: Authors.

among those relationships. The results show that work-family conflict, perceived organizational support, job

burnout and job satisfaction are moderating mediating models. The results show that work-family conflict has a

significant negative predictive effect on job satisfaction, that is, the higher (lower) the work-family conflict of female college teachers, the lower (higher) their job satisfaction will be, which supports the previous research view that work-family conflict will significantly affect job satisfaction (Dodanwala and Shrestha, 2021; confirming that work-family conflict is an effective predictor of individual job satisfaction (Mesmer-Magnus and Viswesvaran, 2005). However, work-family conflict does not directly affect job satisfaction, but has a negative impact on it through job burnout. At the same time, the relationship between work-family conflict and job burnout of female college teachers is moderated by perceived organizational support.

In the case of high perceived organizational support, the negative predictive effect of work-family conflict on job satisfaction of female college teachers will be weakened. That is to say, higher perceived organizational support has a buffer effect on lower job satisfaction caused by work-family conflict. This study reveals the mechanism of perceived organizational support and job burnout in the relationship between work-family conflict and job satisfaction of female college teachers, indicating that improving perceived organizational support has a positive significance in improving job burnout of female college teachers, and then improving their job satisfaction.

The relationship between work-family conflict and job satisfaction and the mediating role of job burnout among female college teachers

In a large number of previous studies, the results of the relationship between work-family conflict and job satisfaction are not consistent. Some results show that work-family conflict affects individual job satisfaction, while other studies suggest that there is no significant correlation between them (Carlson and Kacmar, 2000). This study confirms that work-family conflict has a significant negative predictive effect on job satisfaction among female college teachers. In addition, this study also found that job burnout plays a full mediating role between work-family conflict and job satisfaction of female college teachers. On the one hand, the level of job burnout of female college teachers will increase significantly with the increase of work-family conflict, which is consistent with previous theoretical models and research results (Butler, 1993; Frone et al., 1992), that is, work-family conflict is a key predictor of job burnout among female college teachers. According to the resource conservation theory, work-family conflict will lead to psychological distress of employees, resulting in emotional exhaustion and job burnout. In addition, according to the attribution theory, people often attribute conflicts and distress to work. And then take a passive and evasive attitude towards work (Zhan et al., 2023). On the other hand, job burnout is a significant negative

predictor of job satisfaction, which is also consistent with previous studies and theoretical models (Golembiewski et al., 1987), that is, the higher the job burnout, the lower the job satisfaction will be (Visser et al., 2003). Job burnout is a predictor of individual job satisfaction, which affects job satisfaction by affecting job stress, psychological resources, motivation and self-efficacy (Bakker et al., 2003). At the same time, for female college teachers, work-family conflict mainly indirectly affects job satisfaction through job burnout. Compared with other practitioners, female college teachers are affected by traditional social gender concepts and limited personal energy, and bear higher work-family conflict (Forster, 2001), which will lead to higher levels of job burnout and physical and mental health crisis. Therefore, helping female college teachers to reduce the level of job burnout is helpful to improve their job satisfaction and physical and mental health.

Moderating effect of perceived organizational support

Perceived organizational support plays a moderating role in the relationship between work-family conflict and job burnout of female college teachers, and its effect occurs in the first half of the mediating path. When the perceived organizational support of female college teachers gets higher, the level of job burnout caused by work-family conflict will be reduced. This shows that improving the perceived organizational support of female college teachers is helpful to reduce their job burnout. High Perceived organizational support can convey a message to employees that the organization values employees' work efforts and is willing to reward them (Eisenberger et al., 1986), which can not only enhance employees' creativity, performance and job satisfaction, but also reduce the turnover intention, emotional exhaustion and low sense of accomplishment. As mentioned in previous studies, organizational support is conducive to reducing employees' work stress and stabilizing employees' emotions (Lingard and Francis, 2006). Employees are generally less likely to experience job burnout (Asad and Khan, 2003; Lee and Ashforth, 1996). Wang and Xu (2008) also believe that good perceived organizational support can effectively reduce teachers' job burnout in their research on primary and secondary school teachers. The results of this study are also consistent with the resource conservation theory, that is, for female college teachers, perceived organizational support is a kind of material or spiritual help, and it is an available resource to cope with pressure or challenges (Hobfoll, 1989). When they feel insufficient organizational support, their work pressure will increase, resulting in work tension, negative slack and other phenomena.

Therefore, this reminds us that we can reduce the job burnout of female teachers in colleges through this targeted way. Previous studies have shown that when

college teachers receive development support from the organization, they will perceive the organization's recognition and expectation of personal value, resulting in a sense of organizational support (Lin, 2022). When the perceived organizational support is stronger, college teachers can experience the control and pleasure of their own behavior, so they are more willing to actively learn relevant knowledge for their own development and completion of work, and the activities that enhance the perceived organizational support include learning opportunities for teaching development, learning opportunities for academic development, and independent decision-making opportunities for career development etc. (Liu et al., 2018) which means that career development, employee benefits and training, and growth opportunities are the most important supportive HR practices (Allen et al., 2003; Meyer and Smith, 2000). Therefore, college teacher development centers should create a safe and comfortable environment for teachers, so that teachers are willing to seek help from teacher development centers when they are in trouble (Wei and Zhao, 2017). And need to actively respond to the demands of teachers, provide the required services, enable teachers to make suggestions, strengthen communication, reduce the mandatory pressure on teachers, and provide a fair atmosphere for the organization. Meanwhile, college leaders need to provide detailed leadership support, so as to enhance the sense of organizational support of college teachers (Lin, 2022), alleviate the level of job burnout and improve job performance and job satisfaction.

Research deficiency and prospect

Based on previous studies and theories, this study explored the relationship between work-family conflict and job satisfaction of female college teachers and its mechanism. The results show that work-family conflict has a significant negative predictive effect on job satisfaction, and work-family conflict of female college teachers affects their job satisfaction through job burnout, while perceived organizational support has a moderating effect on work-family conflict. The results have good theoretical and practical value to help female college teachers reduce job burnout and improve job satisfaction, and also provide a basis and inspiration for organizations to improve job performance and protect the physical and mental health of employees.

However, this study also has some shortcomings: Firstly, this study is a cross-sectional study, so it cannot examine the causal relationship between variables, and it is necessary to further explore the causal relationship between these variables through experiments or longitudinal studies in the future. Secondly, job satisfaction may also affect the work-family conflict of female college teachers to a certain extent, which needs to be further explored by follow-up studies using experimental or

longitudinal research methods. Finally, this study focuses on the impact of external factors (work-family conflict, job burnout, perceived organizational support) on job satisfaction of female college teachers, while internal factors such as personality need to be further explored and verified in the future.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

- Abate J, Schaefer T, Pavone T (2018). Understanding generational identity, job burnout, job satisfaction, job tenure and turnover intention. *Journal of Organizational Culture, Communications and Conflict* 22(1):1-12.
- Allen DG, Shore LM, Griffeth RW (2003). The role of perceived organizational support and supportive human resource practices in the turnover process. *Journal of management* 29(1):99-118.
- Allen TD, Herst DEL, Bruck CS, Sutton M (2000). Consequences associated with work-to-family conflict: A review and agenda for future research. *Journal of occupational health psychology* 5(2):278.
- Allen TD, Johnson RC, Kiburz KM, Shockley KM (2013). Work-family conflict and flexible work arrangements: Deconstructing flexibility. *Personnel psychology* 66(2):345-376.
- Asad N, Khan S (2003). Relationship between job-stress and burnout: Organizational support and creativity as predictor variables. *Pakistan Journal of Psychological Research* 18(3/4):139.
- Bakker AB, Demerouti E, Taris TW, Schaufeli WB, Schreurs PJ (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of stress management* 10(1):16.
- Butler R (1993). Effects of task-and ego-achievement goals on information seeking during task engagement. *Journal of personality and social psychology* 65(1):18.
- Carlson DS, Kacmar KM (2000). Work-family conflict in the organization: Do life role values make a difference? *Journal of management* 26(5):1031-1054.
- Dodanwala TC, Shrestha P (2021). Work-family conflict and job satisfaction among construction professionals: the mediating role of emotional exhaustion. *On the Horizon: The International Journal of Learning Futures* 29(2):62-75.
- Eisenberger R, Huntington R, Hutchison S, Sowa D (1986). Perceived organizational support. *Journal of applied psychology* 87(4):698.
- Eisenberger R, Rhoades Shanock L, Wen X (2020). Perceived organizational support: Why caring about employees counts. *Annual Review of Organizational Psychology and Organizational Behavior* 7(101-124).
- Erdamar G, Demirel H (2014). Investigation of Work-family, Family-work Conflict of the Teachers. *Procedia-Social and Behavioral Sciences* 116:4919-4924.
- Ferreira AI, Mach M, Martinez LF, Brewster C, Dagher G, Perez-Nebra A, Lisovskaya A (2019). Working sick and out of sorts: a cross-cultural approach on presenteeism climate, organizational justice and work-family conflict. *The International Journal of Human Resource Management* 30(19):2754-2776.
- Forster N (2001). A case study of women academics' views on equal opportunities, career prospects and work-family conflicts in a UK university. *Career development international* 6(1):28-38.
- Frone MR, Russell M, Cooper ML (1992). Antecedents and outcomes of work-family conflict: testing a model of the work-family interface. *Journal of applied psychology* 77(1):65.
- Golembiewski RT, Hilles R, Daly R (1987). Some effects of multiple OD interventions on burnout and work site features. *The Journal of Applied Behavioral Science* 23(3):295-313.
- Hobfoll SE (2011). Conservation of resource caravans and engaged settings. *Journal of occupational and organizational psychology*

- 84(1):116-122.
- Hobfoll SE (1989). Conservation of resources: A new attempt at conceptualizing stress. *American psychologist* 44(3):513.
- Hobfoll SE, Halbesleben J, Neveu J-P, Westman M (2018). Conservation of resources in the organizational context: The reality of resources and their consequences. *Annual review of organizational psychology and organizational behavior* 5:103-128.
- Kelly LA, Gee PM, Butler RJ (2021). Impact of nurse burnout on organizational and position turnover. *Nursing outlook* 69(1):96-102.
- Kurtessis JN, Eisenberger R, Ford MT, Buffardi LC, Stewart KA, Adis CS (2017). Perceived organizational support: A meta-analytic evaluation of organizational support theory. *Journal of management* 43(6):1854-1884.
- Lee RT, Ashforth BE (1996). A meta-analytic examination of the correlates of the three dimensions of job burnout. *Journal of applied Psychology* 81(2):123.
- Li X (2019). Research on Teachers' work Burden and its Influencing Factors: An empirical analysis based on the data of China Education Tracking Survey (2014-2015 academic year). *Journal of Shanghai Educational Research* 3:5-9. https://xueshu.baidu.com/usercenter/paper/show?paperid=1d1p0m003f640e70nm6y0xn03w196119&site=xueshu_seDOI:10.16194/j.cnki.31-1059/g4.2019.03.003
- Lim TL, Omar R, Ho TCF, Tee PK (2021). The roles of work-family conflict and family-work conflict linking job satisfaction and turnover intention of academic staff. *Australian Journal of Career Development* 30(3):177-188.
- Lin Q, Guan W, Zhang N (2022). Work-family conflict, family well-being and organizational citizenship behavior: A moderated mediation model. *International Journal of Conflict Management* 33(1):47-65.
- Lin XJ (2022). Relationship between faculty perceived organizational support and development motivation: The mediating role of basic psychological needs. *China Journal of Health Psychology* 30(11):1654-1660.
- Lingard H, Francis V (2006). Does a supportive work environment moderate the relationship between work-family conflict and burnout among construction professionals? *Construction management and economics* 24(2):185-196.
- Liu XY, Zhou AQ, Liu J (2018). Two Faces of Charismatic Leadership. *Journal of Management* 34(2):112-122.
- Madigan DJ, Kim LE (2021). Towards an understanding of teacher attrition: A meta-analysis of burnout, job satisfaction, and teachers' intentions to quit. *Teaching and teacher education* 105(103425).
- Maslach C, Jackson SE (1981). The measurement of experienced burnout. *Journal of organizational behavior* 2(2):99-113.
- Mesmer-Magnus JR, Viswesvaran C (2005). Convergence between measures of work-to-family and family-to-work conflict: A meta-analytic examination. *Journal of vocational behavior* 67(2):215-232.
- Meyer JP, Smith CA (2000). HRM practices and organizational commitment: Test of a mediation model. *canadienne des sciences de l'administration* 17(4):319-331.
- Mumu JR, Tahmid T, Azad MAK (2021). Job satisfaction and intention to quit: A bibliometric review of work-family conflict and research agenda. *Applied Nursing Research* 59(151334).
- Netemeyer RG, Boles JS, McMurrian R (1996). Development and validation of work-family conflict and family-work conflict scales. *Journal of applied psychology* 81(4):400.
- Panda A, Jain NK, Nambudiri R (2022). Work-family conflict, affective commitment, leadership and job satisfaction: a moderated mediation analysis. *International Journal of Productivity and Performance Management* 71(4):1469-1489.
- Sari RL, Seniati ANL (2020). The role of job satisfaction as mediator between work-life balance and organizational commitment among lecturers. *Psychology and Education* 57(2):106-110.
- Selvarajan T, Singh B, Cloninger PA, Misra K (2019). Work-family conflict and counterproductive work behaviors: Moderating role of regulatory focus and mediating role of affect. *Organization Management Journal* 16(1):42-54.
- Settoon RP, Bennett N, Liden RC (1996). Social exchange in organizations: Perceived organizational support, leader-member exchange, and employee reciprocity. *Journal of applied psychology* 81(3):219.
- Shen Y, Jackson T, Ding C, Yuan D, Zhao L, Dou Y, Zhang Q (2014). Linking perceived organizational support with employee work outcomes in a Chinese context: Organizational identification as a mediator. *European Management Journal* 32(3):406-412.
- Torp S, Lysfjord L, Midje HH (2018). Workaholism and work-family conflict among university academics. *Higher Education* 76(1071-1090).
- Tran QHN (2022). Exploring relationships among overload stress, work-family conflict, job satisfaction, person-organisation fit and organisational commitment in public organizations. *Public Organization Review* pp. 1-17.
- Visser MR, Smets EM, Oort FJ, De Haes HC (2003). Stress, satisfaction and burnout among Dutch medical specialists. *Cmaj* 168(3):271-275.
- Wang L, Shi K, Luo DY (2019). Research on the Influence Mechanism of Work-family Conflict and Ruminant Thinking on Subjective Well-being. *Journal of Northeastern University (Social Science)* 21(5):480-488.
- Wang LH, Xu CJ (2008). Impact of Primary and Secondary School Teachers' Perceived Organizational Support on Their Happiness and Job Burnout. *Chinese Journal of Clinical Psychology* 16(6):574-575.
- Wang XY, Hu R (2012). Analysis on Influencing factors of job burnout of New Generation migrant workers. *Journal of Fujian Provincial Committee Party School of CPC* 5:68-73 <http://www.zgfjsw.dxxb.cn/html/gkl/2012/9641.html>
- Wei H, Zhao B (2017). The Status Analysis and Future Prospects on the Faculty Development Centers in China —Based on the content analysis of the reports of 69 faculty development centers. *China Higher Education Research* 3:94-99.
- Wei W, Ni H (2020). The influence of work-to-family conflict on employees' work behavior: On the perspective of conservation of resources theory and identity theory. *Journal of Industrial Engineering and Management* 34(1):25-33.
- Weiss DJ, Dawis RV, England GW (1967). Manual for the Minnesota satisfaction questionnaire.
- Wen ZL, Ye BJ (2014). Different Methods for Testing Moderated Mediation Models: Competitors or Backups? *Acta psychologica sinica* 46(5):714-726.
- Wright TA, Cropanzano R (1998). Emotional exhaustion as a predictor of job performance and voluntary turnover. *Journal of applied psychology* 83(3):486.
- Yew VGW, Ramos HM (2019). The relationship between perceived organizational support, age, and burnout: implications for the Malaysian higher education workplace. *International Journal of Employment Studies* 27(2):35-57.
- Zhan QS, Ding YW, Wang D (2023). Relationship between work-family conflict and job burnout among oil workers: The mediating role of coping styles. *China Journal of Health Psychology* 31(1):71-76.
- Zhou H, Long LR (2004). Statistical test and control methods for common method deviations. *Advances in Psychological Science* 12(6):942-950.

Full Length Research Paper

Comparison of career adapt-abilities of students from faculty of education with emotional intelligence levels

Meşhude Şentürk, Oğuzhan Kırdök and Oğuzhan Çolakkadioğlu*

Faculty of Health Sciences, Osmaniye Korkut Ata University, Osmaniye, Turkey.

Received 7 June, 2023; Accepted 7 July, 2023

This study aims to examine whether the career adaptation score averages of 1st and 4th-year students studying in different departments of the Faculty of Education differ significantly from the average scores of interest, control, curiosity, and confidence sub-scales aimed at measuring the sources of adaptation compared to the emotional intelligence score averages. Research is a descriptive study in the relational screening model. Of the 418 students in the research group, 314 were girls and 104 were boys. In this study, Personal Information Form created by the researcher to collect the data, the "International Career Adapt-Abilities Scale" developed by Savickas and Profeli (2012) and the Emotional Intelligence Assessment Scale developed by Hall (1999) were used. As a result of the research, it was found that the difference between the scores of the interest, control, curiosity, and confidence sub-dimensions aiming to measure the career adaptability and adaptation sources of the students and the average scores of the emotional intelligence level was significant. In determining the groups that cause the difference between the averages to be important, the interest, control, curiosity, confidence, and career adaptation scores of the students with high emotional intelligence levels were higher than the students with medium and low emotional intelligence levels. In addition, it was observed that interest, control, curiosity, confidence, and career adaptation scores were higher in those with medium emotional intelligence levels compared to those with low emotional intelligence levels.

Key words: Career adaptability, Emotional intelligence, College students.

INTRODUCTION

Career is important in terms of forming the identity, social roles, status, and lifestyle of the individual and covers the professional roles, experiences, and social networks that the individual undertakes throughout his/her business life. Many people, from the moment they enter the business world, want to meet their needs, achieve their goals, be successful in their business, and achieve promotion. In

addition to the fact that the concept of career expresses the progress and promotion of employees in the work they do, the roles and job descriptions that individuals play throughout their lives in business life also express the concept of career. Career is a process that includes progress, pause and regression in roles related to work and profession in the pattern formed by lifelong

*Corresponding author. E-mail: colakkadioglu@gmail.com.

profession and other life roles by influencing each other (Yeşilyaprak, 2012). A career, according to Super (1990), is a series of life-structuring events and is described from a developmental point of view. Savickas (2008), on the other hand, expresses the concept of career as the duties that are possessed before, during and after the profession, leisure activities, and other roles undertaken in society and the individual's adaptation and development while performing all these roles. A career is a lifelong process, beginning in childhood (Ginzberg, 1984; Super, 1990). From a developmental perspective, a career reflects the full range of roles that individuals have throughout their lives (Herr et al., 2004). The conclusion drawn from all these definitions is that career is a lifelong process that starts from childhood and continues, and that it is a feature that evolves with a dynamic structure shaped by the individual's internal and external actors around him/her. Career adaptability refers to the readiness of individuals to tackle unpredictable changes in work conditions by preparing for predictable tasks and participating in job roles (Savickas, 1997). Career adaptability, on the other hand, was used to describe the ability to make career choices and adapt to professional tasks. Career adapt-ability is "an individual's ability to make a series of successful transitions in which labor market, job organization, and underlying professional and organizational knowledge bases may undergo significant changes" (Bimrose et al., 2011). For adults, this term has been considered particularly prominent because it focuses on the relationship between the individual and the environment, and because it carries the idea that adults are involved in both career transitions and career change by developing coping responses and behaviors. Predictable and unforeseen situations may be included in the scope of career adapt-ability. The skills that enable resilience and adaptation to these crises are gathered under four dimensions. These include Interest (focusing on the future), control (having control over the career future), curiosity (discovering oneself and one's work environment), and confidence (believing that one can overcome career difficulties) (Savickas and Porfeli, 2012). These dimensions can be improved by building on top of each other.

Today, career development is not only about knowledge and skills but also about the correct perception, evaluation, and expression of emotions. Emotional intelligence, which is defined as the use of information obtained through emotions in interpersonal relationships, is as important as IQ (Intelligence Quotient) in determining success in business life. It is thought that the problems in business life are not only caused by a lack of technical knowledge and skills, or a lack of ability related to IQ (Intellectual Intelligence) but that the EQ (Emotional Intelligence) level of the individual is related to the ability to adapt to a career. Emotional intelligence is the ability of an individual to recognize the feelings of himself and others, to be self-motivated, and to control his emotions

and emotions in relationships (Goleman, 1998). Emotional intelligence refers to the fact that the individual develops the belief that he/she can do something in the face of life events and that he/she can control himself/herself and his environment with self-control and emotional management. Individuals with high emotional intelligence can postpone pleasure by controlling their own emotions and can control emotions such as anxiety and fear. In the face of difficulties, they prefer to struggle rather than give up. Emotional intelligence, which is related to the abilities and strategies to process emotions, has an impact on many decisions that an individual makes or will make in his/her life. The power of emotional intelligence to affect both oneself and others can also be significantly important in business life. As a result of all this, it is useful to consider the relationship between career adaptability and emotional intelligence. It can be said that the abilities such as coping, empathizing, motivating, and managing relationships within the scope of emotional intelligence have an effective place in the formation of the relationship between career adapt-ability and emotional intelligence.

Emotional intelligence helps to improve an individual's career compatibility, as well as to organize change, seize opportunities and prepare for interaction with the environment. In addition, emotional intelligence is recognized as an important criterion in strengthening the career compatibility of individuals (Vashist et al., 2021). Researchers have also reported that people with high emotional intelligence are more successful in career-related research, career compatibility, and job search (Bateman and Crant, 1993; Brown et al., 2003; Guan et al., 2015; Seibert et al., 2016). At the same time, emotional intelligence provides motivation and self-regulation skills to plan one's career path and how to achieve career goals, and to improve career adapt-abilities (Coetzee and Harry, 2014; Parmentier et al., 2019). According to the theory of emotional intelligence, recognizing and managing emotions helps individuals' better control and regulate their actions towards their careers and rely on their internal processes to make decisions. When the literature is examined, many studies have been conducted to determine the relationship between emotional intelligence and job satisfaction, organizational citizenship behaviors, performance, and leadership. Studies have examined the relationship between emotional intelligence and career adaptability (Coetzee and Harry, 2014); job satisfaction (Weinberger et al., 2022; Kıvanç-Sudak and Zehir, 2013); job performance and organizational citizenship behaviours (Law et al., 2004; Côté and Miners, 2006); job satisfaction, organizational commitment, and organizational citizenship, (Carmeli, 2003), occupational burnout (Güllüce and İşcan, 2010); job satisfaction (Karakuş, 2008; Kırdök and Sarpkaya, 2017); leadership (Acar, 2002; Aksaraylı and Özgen, 2008); organizational citizenship (Özaslan et al., 2009). Studies have shown that emotional intelligence is an important element in the

entire career process of the individual. Accordingly, it is foreseen that those who recognize their emotions are aware of how their emotions affect events and use their emotions effectively will make more successful choices in their career lives. It has been found that individuals with high emotional intelligence (EQ) achieve successful results thanks to their ability to adapt quickly to the current situation, high level of flexibility (flexibility), high level of motivation-optimism (happiness), high level of self-confidence, managing and controlling their own emotions to produce good work (stress management and impulse control) (Coetzee and Harry, 2014; Weinberger et al., 2022). In addition, it has been found that having a high level of emotional intelligence encourages the individual, makes it possible to conduct research when necessary, and to continue the behavior of looking for a job without giving up. It is thought that Career Adapt-Ability and Emotional Intelligence will be key elements in the transition of newly graduated individuals from university to business life and their future career processes and success.

The time spent by individuals in business life in changing world conditions has started to increase gradually. This is a factor that increases the importance of career-related processes. As a result of the increasing importance of career-related processes, the frequency of research on these topics has also increased. In the selection of this research topic where career adapt-ability will be discussed, the effects of increasing the place and importance of a career in human life should not be ignored. In addition to having career-related skills in business life, it is necessary to be able to regulate oneself and one's relationships. This necessity, which brings with it the presence of emotional intelligence in organizational processes, is one of the main factors in choosing this study topic. Obtaining findings that can be used by researchers who will study emotional intelligence and career adapt-ability is considered among the possible contributions of this study to the literature. The teaching profession differs from other professions because of the decisive role it plays in raising future generations. Therefore, it can be said that teachers express an importance beyond their duties. In this study, it was examined whether the career adaptation abilities and interest, control, curiosity and confidence subscales scores of 1st and 4th-grade students studying in different departments of the Faculty of Education showed significant differences according to their emotional intelligence levels.

METHODS

Research model

This study is descriptive research in the type of relational screening model conducted to determine whether the career adaptation ability score and 4 sub-dimensions (interest, control, curiosity, confidence) scores of 1st and 4th-grade students studying at Çukurova

University Faculty of Education differ significantly according to their emotional intelligence levels. The relational screening model is a research model that is often used to determine the existence and quantity of interaction between multiple variables (Büyüköztürk et al., 2013; Karasar, 2004).

Study group

The universe of this research is Çukurova University Faculty of Education 1st and 4th it consists of students studying in the classroom. The sampling of the research is a simple random sampling method. In this direction, the study group of the research consists of a total of 418 students attending the 1st and 4th grades of German Language Teaching, Psychological Counseling and Guidance, Primary School Teaching, Science Teaching and Turkish Language Teaching at Çukurova University Faculty of Education. Of the students, 314 (75%) were girls, and 104 (25%) were boys, with a mean age of 20.81 years.

Research process

After obtaining the necessary permits, scales were applied to a total of 418 students studying in the 1st and 4th grade at Çukurova University Faculty of Education. The purpose of the research and the basic guidelines for the application of the scales were explained and applied by the researcher as a standard in the classroom environment. The voluntary consent form was completed by the students.

Data collection tools

Career adapt-abilities scale (CAAS)

Career Adapt-Abilities Scale (CAAS) is a scale developed by Savickas and Porfeli (2012) that aims to measure the career adapt-abilities of individuals. The scale consists of a total of 24 items, the items are scored in the range of "not strong (1)", and "very strong (5)" in the five-item Likert type, and there are four subscales consisting of six items. These subscales, which aim to measure the sources of adaptation, consist of interest, control, curiosity, and confidence. It is possible to obtain total points from all items belonging to the scale. The high score on the scale in the lower dimensions is an indication that the individual considers himself/herself as stronger in that sub-dimension. The adaptation of the scale into Turkish was carried out by Büyükgöze-Kavas (2014). As a result of the confirmatory factor analysis, it was seen that the concordance values consisting of four factors were within acceptable limits ($\chi^2 = 833.063$, $df = 248$, $p < 0.00$; $\chi^2 / df = 3.36$, $RMSEA = 0.060$, $SRMR = 0.049$; $CFI = 0.90$). Cronbach's Alpha internal consistency reliability coefficients were found to be 0.91 for the total scale, and this value was found as .78 for the interest sub-dimension, as 0.74 for control sub-dimension, as 0.81 for curiosity sub-dimension, and 0.81 for confidence sub-dimension. Within the scope of this research, Cronbach's Alpha internal consistency reliability coefficients of the scale were found to be 0.83 for the interest dimension, 0.76 for the control dimension, 0.82 for the curiosity dimension, 0.81 for the confidence dimension, and 0.92 for the total score. The results of the analysis are expressed in the findings section.

Emotional intelligence assessment scale (EIAS)

The Emotional Intelligence Assessment Scale was developed by

Table 1. One-Way Variance (ANOVA) Analysis results of career fit and sub-scale scores according to emotional intelligence level scores.

Variable		N	\bar{X}	SS	F	P	
Interest	Low	65	18.62	3.39	24.767	0.000	Low-Medium
	Moderate	291	21.19	4.37			Low-High
	High	62	23.84	4.03			Medium-High
Control	Low	65	20.02	4.11	26,103	0.000	Low-Medium
	Moderate	291	22.05	3.92			Low-High
	High	62	25.08	4.17			Medium-High
Curiosity	Low	65	17.85	4.43	34,559	0.000	Low-Medium
	Moderate	291	21.09	4.19			Low-High
	High	62	24.08	4.21			Medium-High
Confidence	Low	65	17.92	3.93	64,922	0.000	Low-Medium
	Moderate	291	21.49	3.66			Low-High
	High	62	25.24	3.02			Medium-High
Career Adaptability	Low	65	74.40	12.58	56,278	0.000	Low-Medium
	Moderate	291	85.82	12.63			Low-High
	High	62	98.24	14.24			Medium-High

Source: Authors.

Hall (1999) and validity and reliability studies in Turkish were conducted by Ergin (2000). The scale is used to determine the emotional intelligence levels of university students. In the original study, the reliability coefficient of the scale was (Cronbach Alpha) 0.84, the reliability coefficient (Cronbach Alpha) was found 0.86 in this study. The scale consists of five sub-scales: being aware of emotions (6 items), managing emotions (6 items), self-motivation (6 items), empathy (6 items), controlling relationships (6 items). The 30-item Likert-type scale is scored as 1: strongly disagree, 2: partially disagree, 3: slightly disagree, 4: slightly agree, 5: partially agree, 6: completely agree. There are no inverted substances on the scale. In the calculation of the subscales, the scores of the responses given to the items that make up this subscale are collected. The sum of the scores taken from 30 items gives the total emotional intelligence score.

Evaluation of data

The data collected through the data collection tools were analyzed in SPSS 22.00 package program. In the study, it was examined by one-way analysis of variance (ANOVA) to whether the total and sub-dimension scores of the student's career adaptation differed according to their emotional intelligence levels. To determine the source of the difference between the means in differentiated cases, the Tukey Test was performed. For the analysis of the data, per the research question, emotional intelligence scores were divided into levels taking into account 1 standard deviation score. Those above 1 standard deviation score were defined as high level; those below 1 standard deviation score were defined as low level; values between these scores were defined as medium level.

FINDINGS

One-way analysis of variance (ANOVA) was performed to determine whether the career adaptation ability and sub-

scale scores of the students of the Faculty of Education differed according to the emotional intelligence level scores and the results were given in Table 1. As seen in Table 1, according to the results of the one-way analysis conducted to determine whether the difference is significant between students' score averages from the emotional intelligence and the score averages from the Career Adapt-Ability Scale, and Interest, Control, Curiosity and Confidence subscales, it was determined that the difference between students' score averages from the emotional intelligence and Interest ($F=24.767$, $p<.001$), Control ($F=26.103$, $p<.001$), Curiosity ($F=34.559$, $p<.001$), Trust ($F=64.922$, $p<.001$) sub-scale score averages and Career Adapt-Abilities Scale total score ($F=56.278$, $p<.001$) was significant. Tukey test was performed to determine the groups that caused the importance of the difference among average scores. According to the results of the Tukey test, the interest, control, curiosity, confidence, and career adaptation scores of the students with high emotional intelligence levels are higher than the students with medium and low emotional intelligence levels. In addition, it was observed that interest, control, curiosity, confidence, and career adaptation scores were higher in those with medium emotional intelligence levels compared to those with low emotional intelligence levels.

DISCUSSION

This study aims to examine whether the average scores of interest, control, curiosity, and confidence sub-scales,

which aim to measure the career adaptation score and adaptation sources of 1st and 4th-year students studying in different departments of the Faculty of Education, differ in terms of emotional intelligence levels and score averages. In line with the purpose of the study, the students' average scores from career adaptation, the mean scores of the interest, control, curiosity, and confidence sub-dimensions aiming to measure the sources of adaptation and the average scores of the emotional intelligence levels were compared. It was found that the difference between the average scores of the interest, control, curiosity, and confidence sub-dimensions aiming to measure the career adaptation and adaptation sources of the students and the emotional intelligence level score averages was significant. In determining the groups that caused the difference between the averages to be significant, it was seen that the average scores of the students with high emotional intelligence levels scores, career adaptation, interest, control, curiosity and confidence sub-dimension scores were higher than the students with medium and low emotional intelligence level score averages, and those with medium emotional intelligence level score averages were higher than those with low emotional intelligence level score averages. The sub-dimension of interest in career adaptability is the realization that it is important to adapt to the future and prepare for the career future. Career interest supports positive attitudes towards career planning and optimism. Career indifference, on the contrary, reflects a lack of planning and hopelessness for the future (Savickas, 2005). In this context, it can be said that individuals with high emotional intelligence have positive attitudes towards planning their careers and the challenges that await them. In the studies conducted consistent with the results of the research, it has been observed that individuals with high levels of emotional intelligence are more self-controlled and more planned individuals who can identify and manage their emotions (Coetzeand Harry, 2014; Parmentier et al., 2019; Pekaar et al., 2018; Pirsoul et al., 2022; Santos et al., 2018; Vashist et al., 2021). The control sub-dimension is when the individual feels responsible for structuring his professional future. Control covers variables such as decision-making, focus on control, self-confidence, and autonomy. Career instability is also seen as a lack of career control (Savickas, 2005). Career control refers to the individual's ability to make career decisions and determination (Koen et al., 2012). In this context, it can be said that individuals with high emotional intelligence are self-confident, independent, and more successful in making career decisions. It is consistent with the research result in the studies conducted (Brown et al., 2003; Coetzee and Harry, 2014; Di Fabio andPalazzeschi, 2009; Jiang, 2016; Udayar et al., 2018). The sub-dimension of curiosity is the initiative to gather information about the types of jobs and job opportunities that the individual wants to work in (Savickas, 2005). Career

curiosity involves the person doing research not only about the job and job opportunities but also about himself. Individuals with a high level of career curiosity make efforts to increase their awareness of their interests, talents, and life values as well as the characteristics of the profession, routines maintained, rewards, etc. (Savickas, 2020). Wanberg et al. (2010) state that job search is not a one-time event, but a medium- and long-term process that recurs at various points. Acquiring accurate business knowledge involves a large number of steps that require physical and mental energy, as well as special time and effort, to overcome a series of challenges, such as assessing one's strengths and weaknesses, preparing the necessary documents, participating in job interviews and making choices (Pan et al., 2018). Mittal (2021) states that individuals with high levels of emotional intelligence have a unique role in employment success (number of jobs offers, starting salary, and job-search productivity), are more aware of their emotions, and have a greater capacity to integrate emotional experience and thoughts and actions. In this context, it can be said that individuals with high emotional intelligence are sociable and know their interests and abilities better and gather information about opportunities. The studies conducted in this respect are also consistent with the research findings (Guan et al., 2015; Stubbs-Koman and Wolff, 2008; Wanberg et al., 2010).

Finally, the confidence sub-dimension can be explained as the individual's high level of self-efficacy in terms of successfully making training and vocational planning for a career, and at the same time, it also expresses that individuals consider themselves sufficient to solve career problems. The lack of this sub-dimension is the inability to perform roles appropriately, which can prevent individuals from achieving their goals (Savickas, 2005). Career confidence involves working to strengthen the individual's self-efficacy and self-acceptance (Savickas, 2020). One of the most important characteristics of individuals with high emotional intelligence is "self-activation". Mobilizing oneself involves making a plan, drawing boundaries, and solving the problems one encounters. In this context, it can be said that individuals with high emotional intelligence have a high level of self-efficacy, know what they can and cannot do, and can solve their problems. It is consistent with the research result in the studies conducted (Coetzee and Hary, 2014; Gardner and Stough, 2002; Parmentier et al., 2019; Pong and Leung, 2023; Rudolph, 2017). Overall, a strong career fit skill enables individuals to proactively deal with challenging environments and develop the capacities they need to adapt to the work environment. Alignment involves adjusting career goals and choices to maintain a successful and fulfilling life career (Guo et al., 2014). It can be said that individuals with high emotional intelligence can adapt to business life more easily and thus be successful. Today, it is seen that the factors that ensure success in business life are not only knowledge

and talent. There is a need for individuals who are efficient, foresighted, and able to adapt to changes, that is, individuals with high emotional intelligence. In this direction, in some studies conducted in Turkey, it has been determined that emotional intelligence has positive effects on leadership behaviours (Acar, 2002) and positive effects on academic career development (Aksaraylı and Özgen, 2008; Mammadov and Keser, 2016), greatly increased job satisfaction (Kıvanç-SudakandZehir, 2013; Karakuş, 2008). Abroad, many researchers have stated that other types of intelligence may be important in predicting who will be successful in life and have studied the development and functionality of emotional intelligence development programs for the future of a career (Seal et al., 2011; Carter, 2015). The issue of emotional intelligence and involvement in the profession emphasizes the business world of individuals, their experiences with the business world and the need to constantly discover themselves (Bubany et al., 2008). All these results show that individuals with high emotional intelligence may also have better career adaptation. Studies have also found significant relationships between emotional intelligence and career adjustment (Coetzee and Harry, 2014; Garcia and Costa, 2014; Parmentier et al., 2019; Pong and Leung, 2023).

CONCLUSION AND RECOMMENDATIONS

It was found that the difference between the average scores of the interest, control, curiosity, and confidence sub-dimensions aiming to measure the career adaptation and adaptation sources of the students and the emotional intelligence level score averages was significant. In determining the groups that caused the difference between the averages to be significant, it was seen that the average scores of the students with high emotional intelligence levels scores, career adaptation, interest, control, curiosity and confidence sub-dimension scores were higher than the students with medium and low emotional intelligence level score averages, and those with medium emotional intelligence level score averages were higher than those with low emotional intelligence level score averages. The research can be carried out in different samples and at different grade levels.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

Acar F (2002). Duygusal zekâ ve liderlik. Erciyes Üniversitesi Sosyal Bilimler Enstitüsü Dergisi 1(12):53-68.
Aksaraylı M, Özgen I (2008). Akademik kariyer gelişiminde duygusal zekânın rolü üzerine bir araştırma. Ege Akademik Bakış Dergisi 8(2):755-769.

Bateman TS, Crant JM (1993). The proactive component of organizational behavior: A measure and correlates. *Journal of Organizational Behavior* 14(2):103-118.
Bimrose J, Barnes SA, Brown A, Hughes D (2011). The role of career adaptability in skills supply. Evidence Report 35. Technical Report. Wath-upon-Deerne: UKCES.
Brown C, George-Curran R, Smith ML (2003). The role of emotional intelligence in the career commitment and decision-making process. *Journal of Career Assessment* 11(4):379-392.
Bubany ST, Krieshok TS, Black MD, McKay RA (2008). College students' perspectives on their career decision making. *Journal of Career Assessment* 16:177-197.
Buyukgoze-Kavas A (2014). Validation of the Career adapt-abilities scale Turkish form and its relation to hope and optimism. *Australian Journal of Career Development* 23(10):125-132.
Büyükoztürk Ş, Kılıç-Çakmak E, Akgün ÖE, Karadeniz Ş, Demirel F (2013). Bilimsel araştırma yöntemleri (14. Baskı) Ankara: Pegem Akademi.
Carmeli A (2003). The relationship between emotional intelligence and work attitudes, behavior, and outcomes: An examination among senior managers. *Journal of Managerial Psychology* 18(8):788-813.
Carter SD (2015). Emotional intelligence: A qualitative study of the development of emotional intelligence of community college students enrolled in a leadership development program [Unpublished doctoral dissertation]. Colorado State University.
Coetzee M, Harry N (2014). Emotional intelligence as a predictor of employees' career adaptability. *Journal of Vocational Behavior* 84(1):90-97.
Côté S, Miners C (2006). Emotional intelligence cognitive intelligence and job performance. *Administrative Science Quarterly* 51(1):1-28.
Di Fabio A, Palazzeschi L (2009). An in-depth look at scholastic success: Fluid intelligence, personality traits or emotional intelligence?. *Personality and Individual Differences* 46(5-6):581-585.
Ergin EF (2000). Üniversite öğrencilerinin sahip oldukları duygusal zeka düzeyi ile 16 kişilik özelliği arasındaki ilişki üzerine bir araştırma. [Unpublished master's thesis]. University of Selçuk.
García JMDH, Costa JLC (2014). Does trait emotional intelligence predict unique variance in early career success beyond IQ and personality?. *Journal of Career Assessment* 22(4):715-725.
Gardner L, Stough C (2002). Examining the relationship between leadership and emotional intelligence in senior level managers. *Leadership & Organization Development Journal* 23(2):68-78.
Ginzberg E (1984). Career development. In Brown Dand Brooks L (Eds.). *Careerchoice and development*. San Francisco: Jossey-Bass.
Goleman D (1998). The emotionally competent leader. In *The Healthcare Forum Journal* 41(2):36-38.
Guan Y, Zhou W, Ye L, Jiang P, Zhou Y (2015). Perceived organizational career management and career adaptability as predictors of success and turnover intention among Chinese employees. *Journal of Vocational Behavior* 88:230-237.
Guo Y, Guan Y, Yang X, Xu J, Zhou X, She Z, Fu M (2014). Career adaptability, calling and the professional competence of social work students in China: A career construction perspective. *Journal of Vocational Behavior* 85(3):394-402.
Güllüce AÇ, İşcan ÖF (2010). Mesleki tükenmişlik ve duygusal zekâ arasındaki ilişki. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi* 5(2):7-29.
Hall DT (1999). Accelerate executive development-at your peril!. *Career Development International* 4(4):237-239.
Herr EL, Cramer SH, Niles SG (2004). *Career guidance and counseling through the lifespan-Systematic approaches* (6th ed.). Boston: Allyn& Bacon.
Jiang Z (2016). Emotional intelligence and career decision-making self-efficacy: Mediating roles of goal commitment and professional commitment. *Journal of Employment Counseling* 53(1):30-47.
Karakuş M (2008). Yöneticilerinin ve öğretmenlerin duygusal zekâ yeterliklerinin, öğretmenlerin duygusal adanmışlık, örgütsel vatandaşlık ve iş doyumuna düzeylerine etkisi [Unpublished doctoral dissertation]. University of Firat.
Karasar N (2004). *Bilimsel araştırma yöntemleri*. Ankara: Nobel Yayıncılık.
Kırdök O, Sarpkaya AA (2017). Okul psikolojik danışmanlarının

- duygusal zekâ düzeylerinin iş doyumunu düzeylerini yordama gücünün incelenmesi. *Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 14(40):86-100.
- Kıvanç-Sudak M, Zehir C(2013). Kişilik tipleri, duygusal zekâ, iş tatmini ilişkisi üzerine yapılan bir araştırma. *Yönetim Bilimleri Dergisi* 11(22):141-165.
- Koen J, Klehe UC, Van Vianen AE (2012). Training career adaptability to facilitate a successful school-to-work transition. *Journal of Vocational Behavior* 81(3):395-408.
- Law K, Wong C, Song L (2004). The construct and criterion validity of emotional intelligence and its potential utility for management studies. *The American Psychological Association* 89(3):483-496.
- Mammadov E, Keser E (2016). Duygusal zekâ ile akademik başarı ilişkisi: Turizm lisans öğrencileri üzerinde bir araştırma. *Seyahat ve Otel İşletmeciliği Dergisi* 13(3):85-101.
- Mittal S (2021). Ability-based emotional intelligence and career adaptability: role in job-search success of university students. *Higher Education, Skills and Work-Based Learning* 11(2):454-470.
- Özaslan BÖ, Beyhan-Acar A, Acar AC(2009). Duygusal zekâ ve örgütsel vatandaşlık davranışı arasındaki ilişkinin incelenmesine yönelik bir araştırma. *Yönetim Dergisi* 20(64):98-111.
- Pan J, Guan Y, Wu J, Han L, Zhu F, Fu X, Yu J (2018). The interplay of proactive personality and internship quality in Chinese university graduates' job search success: The role of career adaptability. *Journal of Vocational Behavior* 109:14-26.
- Parmentier M, Pirsoul T, Nils F (2019). Examining the impact of emotional intelligence on career adaptability: A two-wave cross-lagged study. *Personality and Individual Differences* 151:1-6.
- Pekaar KA, Bakker AB, van der Linden D, Born MP (2018). Self-and other-focused emotional intelligence: Development and validation of the Rotterdam Emotional Intelligence Scale (REIS). *Personality and Individual Differences* 120:222-233.
- Pirsoul T, Parmentier M, Nils F (2022). Emotional intelligence profiles and job search correlates in the context of the school-to-work transition. *Journal of Career Development* pp. 1-20
- Pong HK, Leung CH (2023). Cross-sectional study of the relationship between trait emotional intelligence and career adaptability of Chinese youths. *BMC Public Health* 23(1):1-16.
- Rudolph MM (2017). A correlational quantitative study on the relationship of a clinical instructor's emotional intelligence to the degree of student satisfaction with the clinical instructor [Unpublished doctoral dissertation]. Northcentral University.
- Santos A, Wang W, Lewis J (2018). Emotional intelligence and career decision-making difficulties: The mediating role of career decision self-efficacy. *Journal of Vocational Behavior* 107:295-309.
- Savickas ML (1997). Career adaptability: An integrative construct for lifespan, life-space theory. *Career Development Quarterly* 45:247-259.
- Savickas ML (2005). The theory and practice of career construction. In Lent RW and Brown SD (Eds). *Career development and counseling: Putting theory and research to work* (pp. 42-70). Hoboken, NJ: Wiley.
- Savickas ML (2008). Helping people choose jobs: A history of the guidance profession. In Athanasou, JA and Van Esbroeck R (eds) In *International handbook of career guidance* (pp. 97-113). Dordrecht: Springer Netherlands. https://doi.org/10.1007/978-1-4020-6230-8_5
- Savickas ML, Porfeli EJ (2012). Career adapt-abilities scale: Construction, reliability, and measurement equivalence across 13 countries. *Journal of Vocational Behavior* 80(3):661-673.
- Savickas ML (2020). Career construction theory and counseling model. In Lent RW and Brown SD (Eds.) *Career development and counseling: Putting theory and research into work* (3rd ed, Wiley) pp. 165-200.
- Seal CR, Naumann SE, Scott AN, Royce-Davis J (2011). Social emotional development: A new model of student learning in higher education. *Research in Higher Education Journal* 10:1-13.
- Seibert SE, Kraimer ML, Heslin PA (2016). Developing career resilience and adaptability. *Organizational Dynamics* 45(3):245-257.
- Stubbs-Koman E, Wolff SB (2008). Emotional intelligence competencies in the team and team leader: A multi-level examination of the impact of emotional intelligence on team performance. *Journal of Management Development* 27(1):55-75.
- Super DE (1990). A life-span, life-space approach to career development. In Brown Dand Brooks L (Eds). *Career Choice and Development: Applying Contemporary Theories To Practice* (2nd ed, pp. 197-262). San Francisco, CA: Jossey-Bass.
- Udayar S, Fiori M, Thalmayer AG, Rossier J (2018). Investigating the link between trait emotional intelligence, career indecision, and self-perceived employability: The role of career adaptability. *Personality and Individual Differences* 135:7-12.
- Vashisht S, Kaushal P, Vashisht R (2021). Emotional intelligence, personality variables and career adaptability: A systematic review and meta-analysis. *Vision* 27(3):316-328.
- Wanberg CR, Zhu J, Van Hooft EA (2010). The job search grind: Perceived progress, self-reactions, and self-regulation of search effort. *Academy of Management Journal* 53(4):788-807.
- Weinberger A, Austin R, Knight ME (2022). Customer orientation: Help or hindrance to alternative work arrangement in accounting?. *Journal of Managerial Issues* 34(1):41-60.
- Yeşilyaprak B (2012). *Mesleki rehberlik ve kariyer danışmanlığı kuramdan uygulamaya*, Ankara: Pegem Akademi.

Full Length Research Paper

Research on metacognition and innovation behavior of vocational college students in Hainan

Ling Pan^{1,2} and Yuan-Cheng Chang^{1*}

¹Department of Education Management, Chinese International College, Dhurakij Pundit University, Thailand.

²School of Finance and Economics, Hainan Vocational University of Science and Technology, Haikou, China.

Received 8 June, 2023; Accepted 10 July, 2023

Strengthening the cultivation of students' innovation ability is an urgent requirement for the construction of China's innovation system, and vocational colleges are a crucial driving force for cultivating technical innovation talents. Therefore, this study aims to explore the influence of metacognition on innovative behavior among vocational college students in Hainan, China and the differences between the behavior of boys and girls. Five vocational colleges were selected by purposive sampling. A total 600 students and 577 valid questionnaires were obtained, with 285 male and 292 female respondents. The results of the study found that the metacognition of boys and girls in vocational colleges has a positive and substantial impact on innovative behavior, and that the effect of metacognition on the innovative behavior of girls is higher than that of boys.

Key words: Vocational school students, metacognition, innovative behavior.

INTRODUCTION

Strengthening the cultivation of students' innovation ability is urgently required to construct China's innovation system and an important measure to promote higher education reform and higher-quality innovation of college graduates (Jia and Wang, 2018). Education is an essential core of cultivating innovative ability and innovative skills development. Innovative skills are skills that students must prepare for in the face of increasingly complex living and working environments (Keinänen et al., 2018). Therefore, college students need to have innovative abilities, and higher education is essential in cultivating college students' innovative skills

(Ovbiagbonhia et al., 2019).

In their research, Kim and Lee (2018) pointed out that metacognition is a critical dominant factor in enhancing innovative behavior because it involves planning, monitoring, and regulating specific actions to create and introduce new ideas. Schraw and Dennison (1994) defined metacognition as "the ability to reflect on, understand, and control one's learning." Metacognition is described as thoughts about one's knowledge and control over one's cognitive processes and includes both awareness of cognition and understanding of strategies to change cognition (Flavell, 1979). Kuhn (2000) noted

*Corresponding author. E-mail: yuan-cheng.cha@dbu.ac.th.

that metacognition developed early and asserted that the more explicit metacognitive thinking is, the more effectively can one engage in metacognitive thinking and control cognitive processes.

However, when people face a new situation, they go through a social cognitive process in which they recognize available alternatives (Martinsen et al., 2011). Some people are more cognitively flexible than others, who can only remember one suitable option. In addition, higher cognitive flexibility is adapted more actively by exploring and selecting various ways of effective adaptation (Rubin and Martin, 1994). Students' metacognition can also improve their innovative behavior (Ericsson, 1996; Kim and Lee, 2018). Therefore, understanding the influence of students' metacognition on innovative behavior is of great significance to developing students' innovative behavior.

Relationship between metacognition and innovative behavior

Flavell (1979) proposed the concept of metacognition and defined metacognition as knowledge or cognitive activities that reflect or regulate any aspect of mental conditioning, which is "cognition about cognition" (Sternberg, 1994). Learning is a lifelong and thinking process in which the most important structure is an individual's awareness of his own learning and learning process, in other words, an individual's metacognition (Goksu, 2021). Metacognition is the ability to think about our thoughts, and to be more precise, evaluate our thoughts' views (Goksu, 2021). This paper defines metacognition as the psychological process of self-awareness and self-regulation of one's cognitive activities. The macroscopic thinking process of metacognition includes critical thinking, creative and reflective thinking, and problem-solving. Metacognitive skills are part of this process, along with metacognitive knowledge. The sub dimensions of metacognitive skills include oriented activities, systems sequence, evaluation, and refinement activities (Prins et al., 2006).

Drucker (1985) pointed out that innovation is to endow resources with a new ability to create wealth and turn resources into natural resources. It emphasizes the benefits of innovation and a complete and systematic system. Innovation is not a stroke of the sky. They are learning through educational methods. Innovation is a complex process of generating, promoting, and implementing new ideas (Brown and Duguid, 1991; Kazadi et al., 2016). Students' innovative behavior is the process in which they generate innovative ideas and strive to put them into practice in learning and participating in learning activities. A lack of intrinsic motivation to exhibit innovative behavior can lead to individual differences in innovative behavior. Those endowed with inherent reason are learning-oriented and

free from stereotypes, wherein they try to acquire new options and ideas for problem-solving (Kim and Lee, 2018).

During the learning process, student cognition critically impacts learning outcomes (Chang and Tsai, 2022). In the teaching process, the cultivation of cognitive strategies runs through all aspects of information processing, which will help the improvement and development of students' metacognition level (Nie and Xu, 2001); Teachers should guide students to use their metacognition to consciously monitor and adjust the learning process, which is not only conducive to mobilizing students' enthusiasm for learning but also conducive to improving their thinking quality and promoting the development of their intelligence. Metacognition plays a vital role in enhancing learning ability. It is of great significance to improve the learning effect and to pay attention to cultivating students' metacognition ability in the teaching of new chemistry courses, improving their metacognition level, enabling them to master the relevant theories of metacognition, and applying metacognition theory to learning reflection (Ma, 2009). Moreover, effective metacognitive strategies can improve students' academic performance (Anthonysamy, 2021).

Moreover, students who have received metacognitive instructions will acquire entrepreneurial skills faster than those who have not (Mitchell et al., 2006). Metacognition means learning strategies for active, innovative behaviors such as self-directed learning. For an individual to have the ability to set and implement goals, they need a mechanism to monitor and control the dreams themselves. In the case of self-directed learning, a voluntary program assumes that metacognition must precede an individual's strategic behavior to enable autonomous learning through cognitive traits (Bae and Lee, 2010). Moreover, Cognition and metacognition are essential components in the creative process of generating, evaluating, and selecting ideas (Puente-Díaz et al., 2021). Metacognition is the most crucial dominant factor in strengthening innovative behavior because it involves planning, checking, and controlling specific actions in creating and introducing new ideas (Janssen, 2000). In addition, reflective evaluation introduces metacognitive processes and strategies such as monitoring, reflection, and planning into students' creative practice activities, pays attention to the students' subjective status and initiative in the evaluation process, and enables students to continuously cooperate with the learning process and results. Monitoring and reflection encourage students to constantly solve deeper problems, create knowledge (Yang et al., 2016), and help them to generate innovative behaviors.

This study intends to explore the influence of metacognition on the innovative behavior of students in vocational colleges in Hainan, China, and investigates the difference between the impact of metacognition of

Table 1. Descriptive statistics of variables.

Variable	Metacognition	Innovative behaviors
Boys	3.355	3.371
Girls	3.305	3.292
All	3.330	3.331

Source: Authors.

boys and girls on innovative behavior.

MATERIALS AND METHODS

Research objects and sampling

This study mainly explores the influence of metacognition on the innovative behavior of students in vocational colleges in Hainan, China. It separately investigates boys and girls to understand whether there is a difference in the impact of metacognition on their innovative behavior. The research participants in Hainan, China are students from vocational colleges. These colleges focus on training students to become applied professionals, with the majority of graduates entering the job market. Hence, innovation behavior is significant for vocational colleges. Five vocational colleges in Hainan, China, were selected through purpose sampling, surveying 60 boys and 60 girls in each of the colleges (total, 600 students). With invalid questionnaires eliminated, a total of 577 valid questionnaires were obtained, with 285 male and 292 female respondents.

Research instruments

The metacognition scale constructed by Manzar et al. (2018) was used, which includes nine questions for two dimensions, namely, metamemory (5 questions) and meta-attention (4 questions). The 5-point Likert scale was used to assess the level of metacognition on a scale of 1–5 points. In terms of the reliability analysis, the Cronbach's α was .887. Furthermore, confirmatory factor analysis (CFA) was conducted to test the metacognition scale. The factor loading for all questions was between .623 and .774.

The construct reliability (CR) value was 0.901, exceeding the evaluative criteria of 0.60. The average variance extracted (AVE) value was .503, exceeding the evaluative criteria of .50. This indicates that the scale has a high level of discrimination. As for the goodness of fit test of the scale, $\chi^2/df = 5.675$, RMSEA = 0.090, GFI = 0.944, AGFI = 0.903, SRMR = 0.0408, CFI = 0.944, IFI = 0.945, NFI = 0.934, PNFI = 0.674, and PGFI = 0.545 (Bagozzi and Yi, 1988), which indicate that the scale has a satisfying goodness of fit.

The innovative behavior scale constructed by Chang and Jaisook (2021) was used, which includes nine questions for the following three dimensions: "opportunity exploration," "generativity and formative investigation," and "championing and application." The 5-point Likert scale was used to assess the level of innovative behaviors on a scale of 1–5 points. In terms of the reliability analysis, the Cronbach's α was 0.932. CFA was conducted to test the innovative behaviors scale. The factor loading for all questions was between .661 and 0.840. The CR value was .948, exceeding the evaluative criteria of 0.60. The AVE value was 0.624, exceeding the evaluative criteria of .50. This indicates that the scale has a high level of discrimination. As for the goodness of fit test of the scale, $\chi^2/df = 5.205$, RMSEA = 0.085, GFI = 0.936, AGFI = 0.898, SRMR = 0.0347, CFI = 0.957, IFI = 0.957, NFI = 0.948, PNFI = 0.707, and PGFI = 0.582 (Bagozzi and Yi, 1988), which indicate that the scale

has a satisfying goodness of fit.

RESULTS AND DISCUSSION

Descriptive statistical analysis

The average score of metacognition and innovative behavior of students in vocational colleges can be seen from the descriptive statistics in Table 1. Students' average score of metacognitions is 3.330, and the average score of innovative behavior is 3.331. The average number of metacognition of boys (3.355) was higher than the average number of metacognition of girls (3.305), and the average number of innovative behaviors of boys (3.371) was also higher than the average number of innovative behaviors of girls (3.292).

SEM analysis

Male students

The overall adaptability test of the overall model for male students was conducted. Measures of absolute fit χ^2/df , 4.025; RMSEA, 0.103; GFI, 0.803; and SRMR 0.0574 were close to the criterion value of 0.05 (Hu and Bentler, 1999). Incremental fit measures, namely, CFI, IFI, NFI, and NNFI were 0.861, 0.862, 0.824, and 0.800, respectively. Parsimonious fit measures, namely, PCFI, PNFI, and PGFI were 0.757, 0.724, and 0.639, respectively. As such, the fit between the theoretical model and observation data is acceptable (Table 2).

As seen from Figure 1, the path coefficients the structural between metacognition and innovative behavior is 0.831 ($p < 0.05$). It means that the metacognition of male students was a positive and significant impact on innovative behavior, and when the students' metacognition is higher, the innovative behavior also increases.

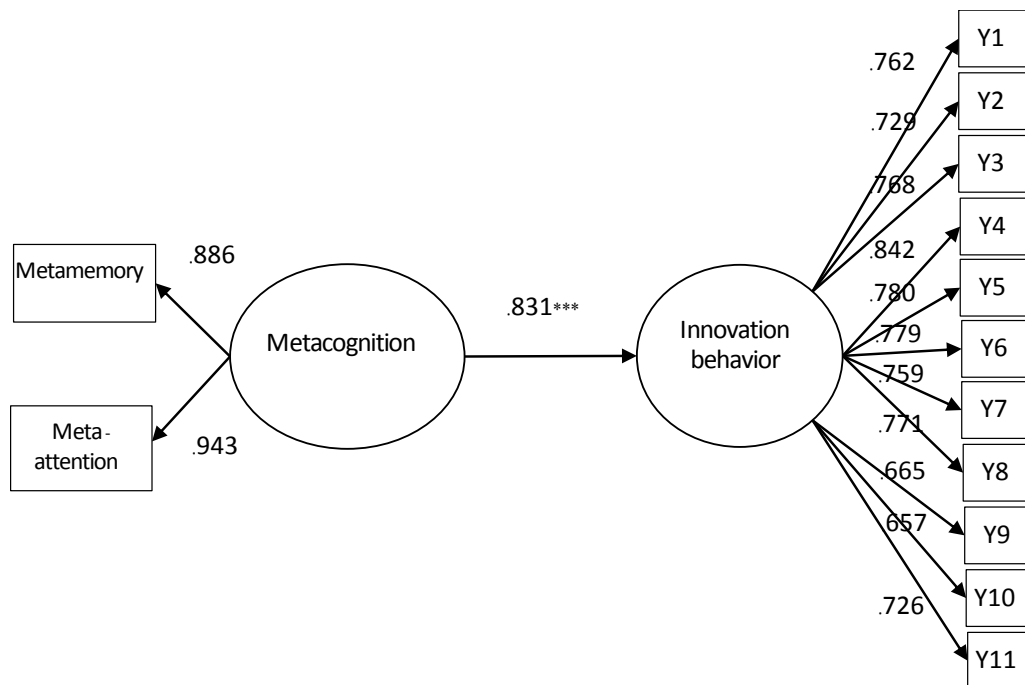
Female students

The overall adaptability test of the overall model for female students was conducted. Measures of absolute fit, namely, χ^2/df , 3.436; RMSEA, .091; GFI, .830; and SRMR, .0498, were close to the criterion value of 0.05 (Hu and Bentler, 1999). Incremental fit measures, namely, CFI, IFI, NFI, and NNFI were 0.882, 0.883, 0.843, and

Table 2. Suitability indicators of the models.

Identify items	Male students	Female students
χ^2/df	4.025	3.436
RMSEA	0.103	0.091
SRMR	0.0574	0.0498
GFI	0.803	0.830
AGFI	0.752	0.786
NFI	0.824	0.843
NNFI	0.800	0.821
IFI	0.862	0.883
CFI	0.861	0.882
PCFI	0.757	0.776
PNFI	0.724	0.741
PGFI	0.639	0.660

Source: Authors.

**Figure 1.** Analysis of male students' metacognition on innovation behavior path *** $p < 0.001$.

Source: Authors.

0.821, respectively. Parsimonious fit measures, namely, PCFI, PNFI, and PGFI were 0.776, 0.741, and 0.660, respectively. As such, the fit between the theoretical model and observation data is acceptable (Table 2).

As seen from Figure 2, the path coefficients the structural between metacognition and innovative behavior is 0.898 ($p < 0.05$). It means that the metacognition of female students has a positive and significant impact on innovative behavior, and when students' metacognition improves, it is conducive to innovation behavior

improvement.

Conclusion

The research results show that the metacognition of boys and girls in higher vocational colleges has a positive and significant impact on innovative behavior, which means that higher metacognition of students in higher vocational colleges, will result in higher innovative behavior. In

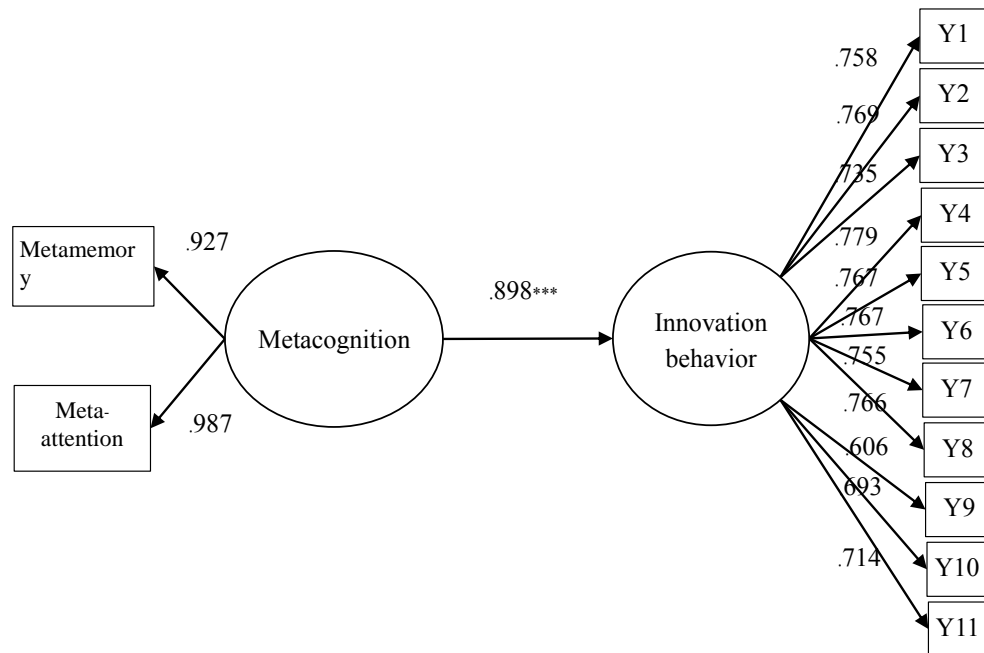


Figure 2. Analysis of female students' metacognition on innovation behavior path *** $p < 0.001$.
Source: Authors.

addition, the improvement of students' metacognition in vocational colleges is conducive to developing their innovative behavior. This result is consistent with the research results of Ericsson (1996) as well as Kim and Lee (2018).

In terms of metacognition, students in higher vocational colleges can concentrate in class, read, participate in lectures and internships, can understand all concepts and practical cases taught in class, remember some critical specific concepts from teachers, and be able to use these concepts in exams or tests, such as metacognitive memory and attention ability, so that you can help yourself to cut into the core of the problem from more angles, propose new methods to solve problems and make innovative ideas come true. In addition, Georgsdottir and Getz (2004) also believe that cognitively flexible people can find ways from new perspectives, propose innovative solutions in various ways, and find new solutions and when students recognize that they have opportunities to develop their abilities, they can engage in innovative activities (Goldsby et al., 2006). Therefore, students in higher vocational colleges should strengthen their metacognitive abilities, such as metamemory and meta-attention, to obtain more professional knowledge and abilities in professional learning and propose new solutions from different angles when encountering problems.

However, in terms of path analysis, girls (0.898) have a more significant impact on innovative behavior than boys (0.831), which means that girls' metacognition is more

helpful to innovative behavior than boys. However, from descriptive statistical analysis, it can be found that the average scores of metacognition and innovative behavior of girls are lower than boys; thus, improving the metacognition of female students is more important.

Therefore, students in higher vocational colleges should concentrate in class, understand and remember all the concepts and practical cases taught by the teacher in the classroom and other essential concepts, and apply these concepts in the test or practice. Cognitive memory and attention ability can propose innovative solutions, find new solutions, and make innovative ideas come true.

Research contributions and research implications

This study found from the results of the influence of metacognition on the innovative behavior of students in vocational colleges in Hainan, China, that both boys' and girls' metacognition can improve their innovative behavior, which shows the importance of metacognition for vocational colleges students' innovative behavior. However, the influence of girls' metacognition on innovative behavior is higher than that of boys. On the other hand, the overall average score of girls' metacognition is lower than that of boys, which is worth noting. Vocational colleges should enhance the metacognition of female students. Moreover, it can be seen from this that metacognition is a critical factor that must be paid attention to, whether in the actual

development of students' innovative behavior in Chinese vocational colleges or related research.

Research limitations

This study aims to investigate Vocational College Students in China, but only 5 Vocational Colleges in Hainan were investigated, and the research results may not extrapolate to other regions. Therefore, it is suggested that future research investigate different regions or different types of Vocational Colleges.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

REFERENCES

- Anthonyamy L (2021). The use of metacognitive strategies for undisrupted online learning: Preparing university students in the age of pandemic. *Education and Information Technologies* 26(6):6881-6899.
- Bae EK, Lee MY (2010). The development of the self-directed learning ability inventory for employees in HRD companies. *The Korean Journal of Human Resource Development* 12(3):1-26.
- Bagozzi R, Yi Y (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science* 16:74-94.
- Brown JS, Duguid P (1991). Organizational learning and communities-of-practice: toward a unified view of working, learning, and innovation. *Organization Science* 2(1):40-57.
- Chang YC, Jaisook N (2021). Differences in the influence of aesthetic experience on the innovative behaviors of Thai students and Chinese international students. *Journal of Applied Research in Higher Education* 13(3):900-913.
- Chang YC, Tsai YT (2022). The Effect of University Students' Emotional Intelligence, Learning Motivation and Self-Efficacy on Their Academic Achievement—Online English Courses. *Frontiers in Psychology* 13:818929.
- Drucker P (1985). *Innovation and entrepreneurship practices and principles*. New York: Harper and Row.
- Ericsson KA (1996). *The road to excellence: the acquisition of expert performance in the arts and sciences, sports and games*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Flavell JH (1979). Metacognition and cognitive monitoring: A new area of cognitive-developmental inquiry. *American Psychologist* 34(10):906-911.
- Georgsdotti AS, Getz I (2004). How flexibility facilitates innovation and ways to manage it in organizations. *Creativity and Innovation Management* 13(3):166-175.
- Goksu MM (2021). Investigation of the extent to which metacognition and epistemological beliefs predict prospective teachers' entrepreneurial dispositions. *International Online Journal of Education and Teaching* 8(1):310-334.
- Goldsbey MG, Kuratko DF, Hornsby JF, Houghton JD, Neck CP (2006). Social cognition and corporate entrepreneurship: a framework for enhancing the role of middle-level managers. *International Journal of Leadership Studies* 2(1):17-35.
- Hu L, Bentler PM (1999). Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives. *Structural Equation Modeling* 6(1):1-55.
- Janssen O (2000). Job demands, perceptions of effort-reward fairness and innovative work behavior. *Journal of Occupational and Organizational Psychology* 73(3):289-302.
- Jia X, Wang J (2018). Can entrepreneurship and innovation be realized through higher education: a review and reflection on economic theory. *Innovation and Entrepreneurship Management* 18:1-15.
- Kazadi K, Lievens A, Mahr D (2016). Stakeholder co-creation during the innovation process: identifying capabilities for knowledge creation among multiple stakeholders. *Journal of Business Research* 69(2):525-540.
- Keinänen M, Ursin J, Nissinen K (2018). How to measure students' innovation competences in higher education: evaluation of an assessment tool in authentic learning environments. *Studies in Educational Evaluation* 58:30-36.
- Kim D, Lee D (2018). Impacts of metacognition on innovative behaviors: focus on the mediating effects of entrepreneurship. *Journal of Open Innovation: Technology, Market and Complexity* 4(2):18.
- Kuhn D (2000). Metacognitive development. *Current Directions in Psychological Science* 9(5):178-181.
- Ma ZC (2009). Exploration on cultivating students' metacognitive ability in chemistry teaching. *Secondary Chemistry Teaching Reference* 12:23-25.
- Martinsen ØL, Kaufmann G, Furnham A (2011). Cognitive style and creativity. In *Encyclopedia of Creativity* (pp. 214-221); Runco MA, Pritzker SR (Eds.). New York, USA: Academic Press.
- Manzar MD, Albouqami A, Salahuddin M, Sony P, Spence DW, Pandi-Perumal SR (2018). The Mizan meta-memory and meta-concentration scale for students (MMSS): a test of its psychometric validity in a sample of university students. *BMC Psychology* 6(1):1-11.
- Mitchell J, Smith J, Davidsson P, Mitchell R (2006). Thinking about thinking about thinking: exploring how entrepreneurial metacognition affects entrepreneurial expertise. In *Frontiers of Entrepreneurship Research 2005* (pp. 1-16) Spinelli S (Ed.). United States of America Babson: College.
- Nie AQ, Xu XQ (2001). Metacognition and the enlightenment of metacognition training to teaching. *Educational Theory and Practice* 21:46-48.
- Ovbiagbonhia AR, Kollöffel B, Brok P (2019). Educating for innovation: students' perceptions of the learning environment and of their own innovation competence. *Learning Environments Research* 22:387-407.
- Prins FJ, Veenman MV, Elshout JJ (2006). The impact of intellectual ability and metacognition on learning: new support for the threshold of problematicity theory. *Learning and Instruction* 16(4):374-387.
- Puente-Díaz R, Cavazos-Arroyo J, Puerta-Sierra L (2021). Idea generation, selection, and evaluation: a metacognitive approach. *Journal of Creative Behavior* 55(4):1015-1027.
- Rubin RB, Martin MM (1994). Development of a measure of interpersonal communication competence. *Communication Research Reports* 11(1):33-44.
- Schraw G, Dennison RS (1994). Assessing metacognitive awareness. *Contemporary Educational Psychology* 19(4):460-475.
- Sternberg RJ (1994). Thinking styles: Theory and assessment at the interface between intelligence and personality. In *Personality and intelligence* (pp. 169-187) Sternberg RJ, Ruzgis P (Eds.). Cambridge: Cambridge University Press.
- Yang Y, van Aalst J, Chan CK, Tian W (2016). Reflective assessment in knowledge building by students with low academic achievement. *International Journal of Computer-Supported Collaborative Learning* 11:281-311.

Full Length Research Paper

Becoming a dreamcatcher: Pre-service EFL teachers' experience of culturally relevant pedagogy as agents of flexibility

Esin Kumlu

Department of English Language Teaching, Faculty of Education Dokuz Eylül University, Turkey.

Received 19 June, 2023; Accepted 21 July, 2023

The dynamics of the 21st century human life calls for adaptability to diversity, change and the ability to remove borders. Teacher education, in the midst of changes in social life, also calls for raising questions about pedagogical practices that can serve as a tool to make a difference. In this study, culturally relevant pedagogy is demonstrated as a promising strategy in promoting a positive environment in EFL classes that has the power to encourage acceptance of multiple perspectives, maintaining positive relationships and healthy thinking. In relation, this article aims to investigate pre-service EFL teachers' experience of culturally relevant pedagogy in order to become a culturally responsive teacher. The participants were a group of 40 students, who were the pre-service teachers of an English language teacher education program at a state university in western Turkey. The pre-service EFL teachers registered for an elective English course, Language and Culture, conducted during the 2021-2022 fall academic year. The objective was to promote pedagogical ideas for the pre-service teachers' future teaching practices. The qualitative data was gathered through narrative frames and focus group interviews and the analysis of the qualitative data indicated that the special modules designed for the course enabled them to become a culturally responsive teacher who could build resilience for their professional journeys and promote a non-judgmental mind in a multicultural setting.

Key words: Culturally relevant pedagogy, culturally responsive teacher, pre-service teacher education, English language teaching, resilience building, Syrian students in Turkey.

INTRODUCTION

According to Ladson-Billings (2009, p. 131) *Telling Isn't Teaching* as teachers in the 21st century can be identified as agents of flexibility and change, whom are expected to be aware of and well-prepared for the dynamics of multicultural classrooms that inherently welcome cultural diversity (Pantić and Florian, 2015;

Bourn, 2016; Datnow, 2020; Clausen et al., 2023). Therefore, teacher education programs must incorporate culturally relevant pedagogy to promote pre-service teachers to become culturally responsive instructors. As a competency for the 21st century, becoming a culturally responsive teacher can be regarded as a vital element of

E-mail: esinkumlu@yahoo.com. Tel: + 90 232 - 3012174.

Author(s) agree that this article remain permanently open access under the terms of the [Creative Commons Attribution License 4.0 International License](https://creativecommons.org/licenses/by/4.0/)

teacher education programs for culture and can be interpreted as a vital element of language and the language classroom (Mitchell and Myles, 2004; Ho, 2009). The indispensable relation between language and culture and vice versa (Halliday and Hassan, 1989; Moran, 2001) is also the root of the positive learning environment in which both the learners and the teacher act as citizens of the world. Therefore, the role of the teacher educators should encapsulate training of pre-service teachers to become culturally responsive individuals who are ready to respond to cultural diversity in the classroom as agents of flexibility and as global citizens.

In such an age, cultural boundaries are blurred with historical forces such as immigration and the characteristics of the 21st century such as globalization. It is therefore not surprising to define cultural awareness as a necessary skill for intercultural communication (Baker, 2009). Intercultural skills can be regarded as an essential element for a user of English as an intercultural communicator. As mentioned by Fantini (2012), intercultural competence also empowers the skills for an *affective* and *appropriate* intercultural communication to overcome cultural and linguistic differences. English language classrooms can be identified as one of the ideal places that have the potential to develop intercultural communicative competence (Young and Sachdev, 2011). However, in order to develop intercultural communicative competence, the teacher should be a culturally responsive teacher who is ready to develop pedagogies in culturally diverse classrooms (Bottiani et al., 2018). This study examined pre-service EFL teachers' experience of culturally responsive pedagogy. The following research questions were asked:

1. How do students' perceptions of their professional and individual identity evolve after their experience with culturally responsive pedagogy?
2. How does the special module alter the perceptions of pre-service EFL teachers regarding the Syrian students in Turkey and British people, who are the representatives of the target language they will teach?

CULTURALLY RELEVANT PEDAGOGY AS AN AGENT OF FLEXIBILITY

When one thinks about the diversity in American culture, it may not be difficult to surmise that culturally relevant pedagogy originated from USA scholarship. Stressing the vital necessity of pedagogy as a strategic tool for teacher education, numerous practitioner scholars have underlined the importance of "multicultural teacher preparation in the 21st century" (Gay and Howard, 2000, p.3) as they believe that "the cultural and social distance between the student and the teachers" grows at an alarming rate and this can affect the instructional process

negatively (Gay, 1993, p. 287). In line with this, practitioner-scholars such as Gloria Ladson Billings, Geneva Gay, and Ana Maria Villegas and Tamara Lucas, who can be regarded as the pioneers of culturally responsive pedagogy (CRP), place cultural diversity and culturally responsive teachers at the center of education. These key researchers in the area concerned about the needs of diverse learners in such a multicultural world and the need of teacher candidates who are ready to understand how the dynamics of culture effect the teaching and learning process in classroom to create a better learning environment (Gay, 1993) and the ways to promote social justice and educational equity in classrooms (Ladson-Billings, 1995). Social justice, which is one of the core values of culturally responsive pedagogy, in education depends upon the belief that regardless of their background, race, gender, ethnicity, or other factors all students are valued and respected. Fostering a sense of belonging, social justice in education seeks to eliminate educational disparities.

Several terms can be used to define CRP including culturally congruent, culturally appropriate, culturally responsive or culturally relevant pedagogy, which was coined by Gloria Ladson-Billings, as one of the key researchers of the area. CRP asserts that learning should be connected to the main components of social, economic, political, ethnic and linguistic elements of daily life that promotes the necessary skills for the students "...to impart knowledge, skills, and attitudes" (Ladson-Billings, 2009, p. 20). Placing diversity and culture at the center of educational conundrum, CRP derives its origin from the need of developing an educational system to safeguard minority students in the USA and creating classroom environment in which diversity is valued (Ladson-Billings, 2009) and in which learning is *for all students* through empowering teachers who are naive about the difficulties of their job and the significance of cultural community as an integral part of their professional life (Ladson-Billings, 2009).

Various research practitioners highlight that students should be aware of the fact that education has the power to eliminate the challenges that originate from differences among social groups (Sleeter, 2011; Samuels, 2018; Ladson-Billings, cited in de Silva et al., 2018, p. 27; Rodríguez-Abitia, 2023). CRP not only focuses upon the needs of the culturally diverse students but also empowering teacher candidates to be ready for such a multicultural learning environment (O'Keeffe et al., 2019; Maybin, 2019; Acquah and Szelei, 2020; Barrio, 2021). The important question is to what extent CRP can help the teacher and students to create a meaningful connection between their cultural community and individual identities (Ladson-Billings, 1994). While CRP, places connectedness with all students, it also creates pathways to promote a culturally responsive teacher who can develop *psychological safety* (Ladson-Billings, 2009, p. 79) in the classroom where the students feel

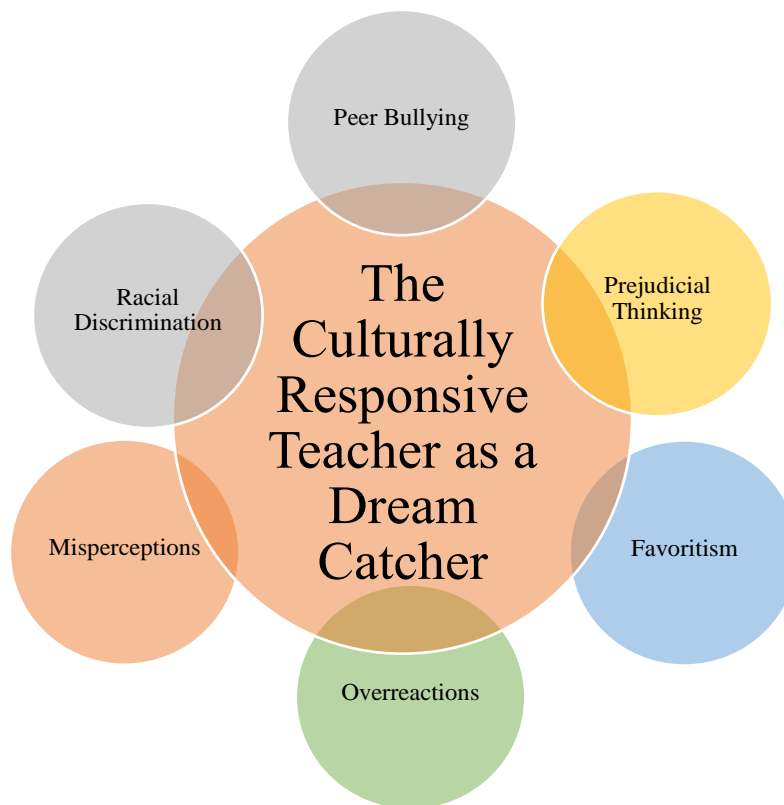


Figure 1. Defining culturally responsive teacher as a dreamcatcher.
Source: Author

themselves secure and supported (Billings, 2009) as culturally relevant teaching aims to eliminate racism, inequality, prejudice and injustice in social life (Ladson-Billings, 1994). Underlined by Ladson-Billings, CRP has the power to encourage pre-service teachers to become agents of change in order to promote equality and flexibility (Ladson-Billings, 2009, p.145). In line with this, culturally responsive teachers can act as agents of flexibility who can build mutual support and understanding as CRP believes that there is an indispensable relation between good teaching and good relationships (Ladson-Billings, 2009). While CRP concentrates upon promoting an environment of flexibility for culturally diverse learners, it also encourages teacher candidates to become agents of flexibility.

CULTURALLY RESPONSIVE TEACHERS AS DREAMCATCHERS

Each student has different needs and even coming from the same cultural background in the same country cannot change the reality that each family has its own cultural system and values. In such a multicultural and diverse social milieu that calls for flexibility, teachers should take into account the cultural therefore, ethnic differences in

the learning environment (Ladson-Billings, 2009). In *The Dream Keepers: Successful Children of African American Children*, Gloria Ladson-Billings underlines the importance of “keeping the dream alive” (2009, p.xvi) rather than identifying the cultural diversity as despair. Deriving inspiration from Martin Luther King Jr.’s famous speech “I have a Dream”, Ladson-Billings underlines the need for sustained efforts to overcome systematic barriers and advocating equality and justice in education, especially for minority groups. She defines culturally responsive teachers as “the Dreamkeepers” (Ladson-Billings, 2009, p. xvi) and she believes that the dream of equal opportunity for all students should be kept alive through educational practices. In line with this, the culturally responsive teacher can be interpreted as a metaphorical dreamcatcher. According to Native American traditions, a dreamcatcher is a symbol of protection, which is used to catch negative thoughts and dreams throughout the sleeping process just like a spider’s web. In this context, the term dreamcatcher is used to define a culturally responsive teacher in class, who acts like a symbolic dreamcatcher to protect the classroom environment from negative elements such as prejudice, misperceptions, prejudicial thinking and eliminate them (Figure 1).The culturally responsive teacher can create a web of relationships that is designed

to catch the possible negative elements in a classroom as that kind of pedagogy gives a way for maintaining positive relationships developed between the teacher and the student (Abacioglu et al., 2020; O'Leary et al., 2020).

Cultivating an environment of flexibility, in which differences and diversity are accepted as wealth, the culturally responsive teacher can cultivate an environment of mutual respect that can allow students to value everyone and honor differences. As a dreamcatcher, the increasingly complex demographic changes therefore would no longer serve as an obstacle for a culturally responsive teacher. The integration of CRP to the curricula of teacher preparation programs with the best possible approaches and strategies can promote the ability to understand and value differences. Educational practices of teacher education programs should therefore match the needs of the new theoretical perspectives, such as culturally responsive pedagogy, critical pedagogy, social-emotional learning (SEL), and universal design for learning (UDL), which can address the needs of the dynamism of multicultural classrooms. To promote equity and justice, teacher education must support culturally responsive pedagogy as a central area of investigation.

MATERIALS AND METHODS

Research design

Narrative inquiry is employed as the starting point of the current study. As a qualitative research approach, narrative inquiry aims to explore and understand individuals' lived experiences through the analysis of stories or narratives. Narrative inquiry analyzes stories and personal accounts to gain insights into their perspectives and the central focus is to examine how individuals make sense of their experiences and how they construct their stories. Narrative inquiry allows researchers to capture the experiences and complexities of individuals through an in-depth analysis of written documents (Chase, 2011). Narrative inquiry is used in this study as it gives the participants the opportunity to link their experiences and actions to make a story lived and told (Creswell and Poth, 2018, p. 68). Narrative research places the personal story at the center of collecting lived experiences that empowers the researcher to create meaning from the stories (Riessman, 2005). While listening and understanding the stories, narrative inquiry opens a "... window into people's beliefs and experiences" (Bell, 2002, p. 209) which helps the researcher to look for deeper meanings. In line with this, narrative inquiry encourages the researcher to analyze the stories of the participants flexibly to unveil the hidden meanings and messages behind their reflections. In this study, in order to draw meaning from narrative frames, the data collection process was followed by transcription and documentation. While capturing the narratives in written form, preserving the original content and structure was important. So as to gain a deep understanding of participants' lived experiences, themes and the context, the narratives were read and re-read. Focusing upon the commonalities or patterns emerged from the data; codes were assigned to specific elements or themes through thematic analysis. After looking for recurring themes or patterns across the narratives, similar codes were grouped together to form overarching themes or categories. Within the light of research questions and objectives, the relationships between the themes were examined. The findings

were documented in a clear and coherent manner. Finally the results of the narrative inquiry were presented, including supporting evidence from the narratives including the identified themes. The data analysis procedure involved revisiting previous steps as new insights emerged.

Participants and setting

The participants of the current study were 40 (20 females and 20 males) Turkish speaking pre-service teachers of an undergraduate English language teacher preparation program at a public university in western Turkey. The participants were between the ages of 18 and 30 and the study was conducted during the 2021-2022 fall academic year within the scope of the elected course *Language and Culture*. All the participants enrolled voluntarily on the elected course. The majority of the participants planned to be English language teachers and some of them had experiences abroad or lived abroad some time in their lives while others had foreign English-speaking friends. Under the supervision of the researcher, who has been the instructor of the same department and university, the students were exposed to culturally relevant pedagogy for the first time and 10 students (5 females and 5 males) participated in the focus group interviews. The participants were informed that their participation would be independent from the grading process and they all participated voluntarily and signed the consent forms.

Procedure

The conceptual framework of the course design encapsulates a multi-cultural education. In the autumn of 2021-2022, the researcher who conducted the course designed a syllabus to integrate culturally relevant pedagogy into the students curricula. The course was an elected course and the objective of the course was to develop pedagogical ideas for the participants' future teaching practices. The curriculum of the 14-weeks course covered the detailed analysis of the cuisine, literature, body language and gestures, popular culture, education systems, music, cinema, art, values and beliefs of 10 different cultures. Culturally, relevant pedagogy is infused into the course to encourage the pre-service teachers to interpret themselves as cultural beings and to develop cultural and ethnic knowledge about self and others for teaching students of all backgrounds. The multicultural background of the course is designed to encourage transformative learning for the participants' future teaching practices. The course content aimed to reflect diverse cultures and perspectives incorporating readings and materials to provide inclusive learning experience. The students were encouraged to explore how race and ethnicity influenced their experiences as a pre-service teacher and as an individual. Critical examination of power dynamics was supported by a positive learning environment and the participants encouraged sharing their perspectives through respectful discussions in order to foster self-reflection. Videos were also integrated into the course content to help the pre-service teachers to broaden their perspectives about minority groups. So as to empower the participants to take action for positive changes for minority groups, social justice issues were added to the course content. The voluntary participation was a wealth for the study and the course was taught in English. The pre-service teachers were divided into groups to encourage collaborative research. Each group chose a different culture and the members of the groups gathered outside the faculty to discuss the results of their researches and then they designed their presentations.

The specific cultures of the presentations were chosen as a result of the interest of the pre-service teachers. The teacher educator, who was also the researcher of the study, did not intervene in the selection process of the cultures. The participants

selected the culture they wanted to study and the teacher educator waited for them to see whether they would choose Syrian or British culture but none of them mentioned these cultures. Then the researcher underlined Syrian culture as there are many Syrian students in EFL classes in Turkey and British culture which represents the target language they will teach. Two of the groups preferred to change their subject and decided to present Syrian and British culture. The goal of the intercultural perspective of the course was to encourage pre-service teachers to interpret themselves as cultural beings. To encourage multicultural teacher preparation for the 21st world, cultural diversity was infused into the teaching process in order to make the participants develop cultural awareness and to realize multicultural requirements of a 21st century teacher. Over the semester, the participants were exposed to values, beliefs, traditions and important features of social life of different cultures. The students prepared their presentations and some of the groups brought the traditional foods and costumes of the selected culture that created a positive environment in the classroom.

According to the comments of the students, it can be assumed that the students enjoyed the multicultural course content. For instance many defined the course as "interesting," "enjoyable," "discoverable," "didactic," "attentive," "entertaining," and "fun." They demonstrated how they felt after they had participated the course with the following words:

I felt like a tourist each week, visiting different places, tasting different foods, and I felt as if my friends who presented each culture as tourist guides (PST 10).

A young girl's best day on which she got many presents (PST 7).

A never-ending story in which I was feeling utterly free. Differences made me feel free (PST 33).

I was always curious about the diversity and richness of language and culture; the course was a great gift for me (PST 40).

A travel all around the world (PST 37).

An adventure times episode (PST 18).

Going to a completely different place for the first time (PST 29).

Data collection

The instruments used in this research were narrative frames and focus group interview. The narrative frame used in the study (Appendix) includes incomplete sentences and blank spaces in order to encourage the participants to share their experiences flexibly (Barkhuizen, 2011, p. 402). Narrative frames were used in the study to understand how the pre-service teachers link their experiences and the circumstances that shape their stories (Glesne, 2016). Data collection for this study also included focus group interviews of 10 (5 were females and 5 were males) pre-service EFL teachers who were part of the study. Interviewees were in the second, third and fourth grade to promote diversity. The focus group questions were developed in the light of culturally relevant pedagogy (Ladson-Billings, 1994; Gay and Howard, 2000). The interview protocol questions were conducted to gain in-depth information about pre-service teachers' experience of culturally responsive pedagogy. The focus group discussions were audio taped with the consent of the participants and transcribed and based on the following questions:

1. What does culturally responsive pedagogy used in the course mean to you?

2. What are the effects of culturally relevant pedagogy upon your professional and individual identity?

Data analysis

After the data were obtained, student excerpts were not corrected grammatically in order to preserve originality; the researcher transcribed and analyzed them within the light of thematic analysis procedure followed by Braun and Clarke (2006). Thematic analysis suited well to the analysis of the qualitative data gathered through the narrative frames and focus group interviews as thematic analysis is a method that promotes a systematic way to identify, organize and offer insight into the myriad of themes from the data set (Braun and Clarke, 2012, p.57). Thematic analysis offered a certain kind of flexibility to the researcher to focus upon the preservice teachers' experiences of culturally responsive pedagogy as the narrators of their own lived experiences and their reflections highlighted in the themes gathered from the data set. Following Braun and Clarke's (2006) 6 steps for thematic analysis, the researcher first familiarized herself with the data, and then she generated initial codes. She then searched for themes, reviewed, defined and named them. Finally, she produced the report. The use of thematic analysis in this study facilitated identifying and analyzing of the patterns of the qualitative data gathered from narrative frames and focus group interviews (Braun and Clarke, 2006). The narrative frames and the transcriptions of the focus group interviews were re-read to highlight the frequency counts carried out and to search for commonalities and differences. The theme, which is the overarching theme, becoming a culturally responsive teacher organized into categories as 1 general theme; resilience building for professional journey, and 2 sub-themes; development of professional and individual identity, and development of a non-judgmental behavior (mind) that all mean maintaining a greater perspective as the prominent characteristic of a culturally responsive teacher.

Validity and reliability

To ensure the validity and reliability of the study, an independent researcher who is an expert of English language teaching for 25 years in the same ELT department analyzed and coded the data. The researcher of the study came together with the independent researcher and the data set was read and re-read. The theme and subthemes were based on the researchers' consensus and the reflexive exercise of the researchers helped them to identify whether their previous experiences have an impact upon their interpretation of the data (Braun and Clarke 2012).

FINDINGS

According to the qualitative data analyzed, the study revealed that pre-service teachers' vision of their future teaching experiences were affected positively as a result of their experience of culturally responsive pedagogy. The first noteworthy point to discuss is the pre-service teachers' building resilience for their professional journeys that promoted a non-judgmental mind, self-confidence, maintaining positive relationships and development of positive coping strategies. While narrative frame excerpts are underlined as PST with numbers, focus group interviews are presented as FG with numbers in the study. The qualitative findings are presented successively.

Becoming a culturally responsive teacher

Resilience building for professional journey (maintaining a bigger perspective)

Building resilience is the general theme of the qualitative data that showcased the result that culturally responsive pedagogy helped pre-service teachers' development of positive coping strategies in class as an emphatic, self-confident and non-judgmental individual and teacher.

Development of professional and individual identity

The qualitative data indicates that the participants' experience in culturally responsive pedagogy encouraged the participants to develop their professional and individual identity in a positive way. While their perceptions of their profession altered throughout the process, their interpretation of themselves as an individual was also affected in a positive way. The pre-service teachers displayed an enhancement of conceptual understanding of their profession and individual identity. Almost all of the participants interpreted the need for culturally responsive pedagogy as a "must" (PST 2; 11; 16; 20; 21; 27; 29; 33; 35, FG 3; 9; 10) or "a necessity" for a teacher candidate (PST3;8;12;14;17;22;26;28;30;32;34;38;40;FG2;5;8). The frequency of the use "must" and "a necessity" demonstrates that they recognized a culturally responsive teaching as a "must" after they had experienced culturally relevant pedagogy. The excerpts below display the need of becoming a culturally responsive teacher as a "must" or "a necessity" for an EFL teacher:

Knowing their cultural codes make it easier for me to understand other people from different cultures. If I have foreign students, I will communicate with them easily. As a teacher this is a must (PST 21).

Now, as I know English people and culture better I can teach that language more consciously. As a teacher this is a must (PST 35).

I was able to see the differences among cultures. As a teacher this means more empathy more tolerance and a better learning environment. I realized that a teacher should have the power to be tolerant and emphatic. This is a great necessity for a teacher. I begin to interpret my profession from a different perspective (PST 8).

I am able to interpret different perspectives and cultures respectfully this can provide me to become a better teacher as I believe that having the power to communicate interculturality is a must for a teacher (PST 27).

The course content must be taken as an important lesson by everyone.

It showed us differences and similarities and how to live with them. I am not aware of the fact that culture is that much important as an important necessity for an EFL teacher (PST 40).

The participants agreed that their experience of culturally responsive pedagogy helped them to interpret their profession from a different perspective and helped them to build resilience as they remarked that after the course they begun to feel themselves stronger as a professional and as an individual who is more emphatic than before. Many of the participants emphasized that their experience of culturally responsive pedagogy helped them to recognize professional and individual identity as a whole. As the following excerpts indicate:

As a teacher and as an individual, I learned about daily life, cuisine, education system, body language and gestures, what to do and not to do in public and in my classes. This is a great gift for a pre-service teacher and for an individual who wants to act as a civilized being (FG 3).

I realized that I did not know anything about different cultures; this would be a tragic gap for a teacher...Not to know how to act to foreign students. I did not even think about this. The course helped both my professional life and my social life (PST 10).

The course helped me to realize that we are all different yet unique. Now, I feel myself stronger than before as a teacher candidate (PST 24).

I realize that diversity is great. Before the course diversity was a trouble for me now I am strong enough to define it as great in my classrooms and in my private life (PST 4).

The OK sign means something completely different in another culture. Without that knowledge a teacher cannot be powerful. Now I feel myself quite strong as a world citizen. The course helped me to understand that a teacher should be a world citizen who is strong and civilized enough to teach all students (PST 15).

The participants shared that they began to interpret diversity positively after the course content and the course content affected both their professional and individual identities:

I feel more powerful. I have started to question the reason of why a usual action seems unusual for me. Now I am ready to understand any student or anyone from the world. I get to see a variety of richness in the world. I have never been part of such diversity. The teacher should be part of this diversity. I feel really self-confident (PST 9).

There are various perspectives that open new visions I

have never a chance to see. I define myself as a teacher differently (FG 10).

The course is like a new breath of life. This class encouraged me to defend the idea of “richness that exists in unknown and spoken world” as our culture will never be sufficient for us to conquer new knowledge as long as we keep living. I feel myself quite powerful as a teacher and as a human being (PST 13).

Another participant said that she learned to respect the “personal space” (PST 27) of her future students and other people in her life.

Development of non-judgmental behavior (mind)

Pre-service EFL teachers’ other response to culturally responsive pedagogy is their development of non-judgmental behavior both as an individual and as a prospective teacher. Interviewees and the qualitative data gathered from the narrative frames highlighted that the pre-service teachers built resilience for their professional journey after they had taken the course as most of them agreed that their experience of culturally responsive pedagogy helped them to develop a non-judgmental attitude that means maintaining positive relationships with their students in professional life and in their social lives. Most of the participants linked this with the development of empathy. Another important gain of the course is the participants’ altering perspectives of British and Syrian cultures and the members of these 2 cultures. Most of the participants stated that before their experience of culturally relevant pedagogy, they had had a negative attitude towards British and Syrian people. Many defined this as “prejudice” and a “danger” for a teacher. The frequency of the use of the words counts; “respect,” “tolerance,” “empathy” indicate that they define their experience of culturally responsive pedagogy with these terms. The excerpts from the student’s narrative frames and focus-group interviews are as the following:

Now I know all the details about British culture. This is great because I realize that they are not cold and distant they just give importance to private space that kind of a consciousness will alter my perceptions about the culture of the language I will teach. I learned many things about different cultures. It provides me developing empathy and being more considerate. I was shocked about my prejudicial mind against British and Syrian people (PST 8).

One of the most interesting things that I’ve learned about the cultural differences is definitely the way parents see their children. Now I can understand and respect my European friends and their families better. Last but not least, my students (FG 7).

Each culture is valuable and is important and different and to understand them is a must. English people had seemed to be cold to me but after learning their cultures my perceptions of them changed completely. I understood the cause of this. I did not know how to understand them (PST 34).

I killed my prejudices towards British and Syrian people but I could only do this when I began to understand them (PST 1).

I learn to respect other cultures especially British and Syrian culture. To be honest, I am ashamed of not knowing how to respect their differences now I feel myself strong as a teacher (PST 20).

I totally altered my perceptions of English people. I thought that they were distant and cold but after I have studied their culture I learn how to respect them (PST 40).

I realized that learning English culture is very important for me to teach the language of that culture. My prejudices towards them disappeared (FG 3).

I learned a lot about Syrian culture. I did not know that this culture is very rich and diverse. I was quite prejudiced towards them but now I am not (PST 16). My worldview about Syrian culture changed a lot. I learned their cultural values and how to act when there is a Syrian student in my class (PST 22).

To be honest I was not aware of the fact that learning Syrian culture would be that much of effect in my life. While I will be teaching them, without this information probably I would develop a certain form of prejudice against them. Now I know that I can understand and respect their differences (PST 34).

Throughout this course I feel that difference is a great beauty in this life. Understanding differences and developing empathy are great comfort in my life especially when I think about my prejudices towards British and Syrian culture. I am happy now because I achieved to destroy them (PST 19).

The participants remarked that they linked becoming a culturally responsive teacher with becoming a strong teacher and an individual in social life. As highlighted by the participants:

I learned why we need to respect different ideas and thoughts. Knowing culture is becoming a strong teacher and a good human being. (FG 5)

I came from Germany and while listening German culture in this course I saw that the information that was given

were quite right. Two of my close friends told me that after the course they began to understand why sometimes I reacted differently to same cases that were experienced in our social lives. This was great for me as being understood by others made me feel free (PST 30).

Now I know why a student from one culture is more punctual than the other. It is just because cultural differences so as a teacher and as a living being now I am a world citizen who is strong enough to be a superhero (PST 25).

The course helped me to prevent misunderstandings during intercultural communication in my professional and my private life. Now I can say that difference is a positive term. Mimics, gestures, body language these are all wealth. Knowing culture is equal to having a peaceful life as a teacher (PST 17).

I changed my mind about culture and my profession. Now, I feel myself strong enough to get over differences. This will also help me in my private life (FG 4).

My worldview changed completely. Now, I know what I should do and should not do in class and in my personal life (PST 27).

All countries have distinctive features and I enjoy learning new gestures because some of them have unexpected meanings. In class this will help me a lot (FG 9).

Being late to a meeting is completely normal in one culture while it's not in another. It made me to develop a link between students' attitudes in class and their culture. So, I will respect them. (PST 15)

I began to interpret difference as beauty not as gap so I would try to be a tolerant teacher and a friend. (FG 1)

DISCUSSION

There is a dynamic relationship between language and culture and that kind of a relationship is the very root of culturally responsive teaching that acts as a bridge between home and school (Erikson and Mohatt, 1982). Originating from USA scholarship, culturally responsive pedagogy can be regarded as an important component of teacher education programs to empower social relations in classrooms as it limits the gap between the culture of home and classroom to promote cultural diversity (Ladson-Billings, 2009). As the students' academic success is directly affected by their cultural therefore, psychological well-being teacher education programs should focus upon the preparation of pre-service teachers for cultural diversity (King and Ladson-Billings, 1990; Noordhoff and Kleinfeld, 1991; Beyer, 1991;

Kleinfeld, 1992). As mentioned by Lipman (1993), the perspectives and beliefs of teachers generally remain unchanged towards some ethnic groups that underlines the need for the integration of culturally responsive pedagogy into the curriculum to develop a community of learners in classrooms where the interaction between the teacher and student is "fluid and humanely equitable" (Ladson-Billings, 2009, p. 66). Culturally responsive pedagogy can be defined as a "theoretical model that not only addresses student achievement but also helps students to accept and affirm their cultural identity while developing critical perspectives that challenge inequities that schools perpetuate" (Ladson-Billings, 1995, p. 469). The qualitative data analyzed in this study indicates that the pre-service teachers' experience of culturally responsive pedagogy altered the way they interpret themselves and others (Ladson-Billings, 2009). The overarching theme becoming a culturally responsive teacher organized into categories as one general theme; resilience building for professional journey and 2 sub-themes; development of professional and individual identity, and development of a non-judgmental mind that all mean maintaining a bigger perspective as a culturally responsive teacher.

Cultural diversity, as a significant component of the global world, has already blurred strict borders in social life and education (Kimmelman and Lang, 2019; Liu and Bal, 2019; Estellés and Fischman, 2021). In line with this, cultural diversity became the central motive of the curriculum for the selected course. The analysis of the qualitative data revealed that the pre-service teachers' response to culturally responsive pedagogy is building resilience that means maintaining a larger perspective as future teachers. According to Masten et al. (1990) resilience can be interpreted as an ability that gives the power to overcome challenging or threatening circumstances (p.425). The idea of building resilience is gaining importance day by day especially after the Covid-19 pandemic and when one thinks about the first 5 years of teachers most of whom are thinking about either leaving the profession or leaving directly without thinking (Wingfield, et al., 2000; Le Cornu, 2009; Tait, 2008). However, at the beginning of their career the teachers who can get over the obstacles they face in their professional journey are the ones who are resilient enough. (Ewing and Manuel, 2005; Le Cornu, 2013; Johnson et al., 2014) It might not be misleading to suggest that teacher burnout is therefore a significant barrier for many teachers (Madigan and Kim, 2021; Pressley, 2021). In line with this, the notion of resilience also gains importance in classrooms of diverse students where the increased attention of the teachers is culture and diversity. When one thinks about the 21st century teachers, burnout is one of the threatening elements for teachers especially in the first years and in culturally diverse classrooms the energy is much more open to burnout when the teacher is not a culturally responsive

instructor (Costa et al., 2023; Strasser, 2023; McCarthy et al., 2023). In relation, it can be claimed that building resilience should be a significant component of pre-service teacher education programs (Weatherby-Fell et al., 2019; Mansfield and Beltman, 2019; Weatherby-Fell et al., 2020; Lutovac and Assuncao, 2021; Ledger, 2021; McKay et al., 2023).

Pre-service teachers' experience of culturally relevant pedagogy encouraged them to develop resilience for their professional lives that is linked to their development of professional teacher identity (McKay and Manning, 2019). Teacher resilience, in this study, is understood as the ability to overcome the challenges of culturally diverse settings caused by unconscious biases and stereotypes, miscommunications and misunderstandings, a stronger sense of purpose in profession, and as "a trait that actively fosters well-being" (Pretsch et al., 2012, p. 322). In this study, becoming a culturally responsive teacher is identified as one of the dimensions of teacher resilience. It can be assumed that becoming a culturally responsive teacher and teacher resilience is closely interconnected. The more culturally responsive a pre-service teacher becomes the more adaptable and flexible he/she becomes. Culturally responsive teachers can adjust instructional strategies in order to meet the diverse needs of their students and this fuels their resilience by giving them a sense of purpose. The process of becoming a culturally responsive teacher also involves the development of strong connections and empathy with students. Culturally responsive teachers can build supportive relationships with their students that can also contribute to their resilience. Culturally responsive teachers nurture student resilience through providing emotional support to help students navigate challenges. Throughout the process, the teacher takes on leadership role as a bridge between educational and social community. This also empowers teacher resilience as while teachers are focusing on nurturing student resilience, they also develop a stronger sense of purpose in their profession. The analysis of the qualitative data suggests that the pre-service teachers build resilience in two ways. The participants' development of professional identity and, last but not least, the limitation of prejudicial thinking. Most of the participants mentioned that their exposition to culturally responsive pedagogy helped them to build resilience as in the narrative frames and focus group interviews many of them mentioned that after the course they had begun to feel themselves strong enough to cope with ever-changing conditions of diverse classrooms (Howard and Johnson, 2004). As mentioned by Van Huizen et al. (2005) beginning with the Vygostkian perspective, the target of teacher education programs has depended upon the development of professional identity. In relation, the analysis of the data indicates that the participants identify strength and confidence not only as a signal of development of resilience but also of professional identity.

The pre-service teachers found a meaningful connection between becoming a culturally responsive teacher and being a strong teacher who can build resilience as the frequency of the use of the words "must" and "necessity" showcase their definition of becoming a culturally responsive teacher as an essential component of their professional and individual identity. Their experience of culturally responsive pedagogy encouraged the majority of the participants to underline that "identity development occurs in an inter subjective field and can be best characterized as an ongoing process, a process of interpreting oneself as a certain kind of person and being recognized as such in a given context" (Gee, 2001 as cited in Beijaard et al., 2004). The notion of professional identity is connected to the way teachers interpret their images of self (Nias, 1989). The pre-service teachers added that they started perceiving themselves as culturally responsive teachers and individuals who have the emotional and intellectual capacity to understand, tolerate and respect differences of culturally diverse students and individuals. Throughout the process, many highlighted that they identified themselves equipped enough for classrooms of culturally diverse students. The analysis of the data unveiled that most of the pre-service teachers were confronted with the reality of diversity in EFL classes for the first time that illuminated their professional maturation process throughout the course. Their perceptions of what an effective teacher were altered as they defined professional identity as being global teachers and world citizens. Therefore, their images of self and others were altered professionally and individually (Knowles, 1992).

The analysis of the qualitative data indicated that the second subtheme is the development of non-judgmental behavior (mind) both as a future teacher and as an individual. One of the challenges that awaits teachers is the need to develop a non-judgmental attitude for their professional journeys as they have to avoid being judgmental in culturally diverse classrooms. Non-judgmental individuals are generally prone to perceive differences, new opinions and diversity as wealth not as an obstacle and teachers do not have the luxury to set standards or benchmarks for their students and therefore the need of a non-judgmental attitude is a must. The focus group interviews and the analysis of the narrative frames probably postulated an air of freedom for the participants as they reflected on their experiences sincerely and candidly. One of the significant results of the data analysis is related to the danger of prejudice against individuals from other cultures especially students and members of Syrian and British Culture. In the Turkish education system the number of Syrian students is dramatically high and most of the participants indicated that they did not have any idea about Syrian culture and they were prejudiced against Syrian students before their experience of culturally relevant pedagogy. Many defined this as a "danger" for a teacher as many mentioned that

their perceptions of Syrian culture altered dramatically and they learned how to respect their differences and began to feel close to the richness of Syrian culture. Most of the students mentioned their surprise that Syrian culture is close to their own culture and defined “prejudice” as a danger for a teacher. Another significant point emerged from the qualitative data is the development of a non-judgmental attitude against British people. What is interesting is the fact that most of the participants had defined British people as cold and distant however, after their experience of culturally responsive pedagogy most of the pre-service teachers underlined that they are not cold and distant but they just give importance to private space. The frequency of the words use “empathy,” “tolerance,” and “respect” highlights that their experience of culturally responsive pedagogy altered their perceptions of other cultures especially Syrian culture, which represents the future students in their classes and British culture, which represents the culture of the target language they will teach. The analysis of the qualitative data demonstrated that the development of a non-judgmental mind (behavior) against other cultures also affected their degree of empathy, in a positive way, as most of the pre-service teachers underlined that after having become a culturally responsive teacher they could understand why a student acts differently from the other. This theme has a vital importance as most of the participants emphasized the significance of knowing of cultural differences as they defined this as a “must” for a teacher so as to promote mutual respect both in classrooms and in social life.

Another dimension of culturally responsive pedagogy for pre-service EFL teachers is that they had the chance of being confronted with classroom realities as almost all of the participants confessed that they had ignored the significance of intercultural communicative competence that promotes professional resilience. It can be assumed that many students become part of teacher education programs with their previous experiences and prejudices before university (Chang-Kredl and Kingsley, 2014) and culturally responsive pedagogy can serve as an efficient tool for them to overcome prejudices against *the other*. War, earthquake, pandemic, immigration and compulsory exile are the main components of the 21st century world that might offer a gloomy picture about the difficulties of becoming a teacher. Building resilience is therefore a must for a pre-service teacher to overcome the difficulties of the age they live in. Culturally responsive pedagogy can be used as an efficient tool to destroy the borders among differences that give a way to understand, respect, and tolerate culturally diverse students in classes. That kind of a pedagogy can both promote the development of professional resilience and individual success in social life. Pre-service teacher education that has the power to alter future generations should give emphasis to the curriculum that supports the development of culturally responsive teachers who are

well-equipped to the diversity that will welcome them. As agents of flexibility pre-service teachers should be thought to be role models to their students so as to promote respectful, empathic and tolerant generations.

CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

REFERENCES

- Abacioqlu CS, Volman M, Fischer AH (2020). Teachers' multicultural attitudes and perspective taking abilities as factors in culturally responsive teaching. *British Journal of Educational Psychology* 90(3):736-752.
- Acquah EO, Szelei N (2020). The potential of modelling culturally responsive teaching: pre-service teachers' learning experiences. *Teaching in Higher Education* 25(2):157-173.
- Baker W (2009). Intercultural awareness and intercultural communication through English: An investigation of Thai English language users in higher education. Doctoral Dissertation, University of Southampton]. University of Southampton Institutional Repository. <https://eprints.soton.ac.uk/66542>
- Barkhuizen G (2011). Home Tutor Cognitions and the Nature of Tutor—Learner Relationships. In: Benson P, Reinders H (Eds.) *Beyond the Language Classroom*. London: Palgrave Macmillan.
- Barrio BL (2021). Understanding culturally responsive practices in teacher preparation: an avenue to address disproportionality in special education. *Teaching Education* 32(4):437-456.
- Beijaard D, Meijer PC, Verloop N (2004). Reconsidering research on teachers' professional identity. *Teaching and Teacher Education* 20:107-128.
- Bell JS (2002). Narrative inquiry: More than just telling stories. *TESOL Quarterly* 36(2):207-213.
- Beyer LE (1991). Teacher education, reflective inquiry, and moral action. In BR Tabachnick, KM Zeichner (Eds.), *Inquiry-oriented practice teacher education* (pp. 112-129). London: Falmer.
- Bottiani JH, Larson KE, Debnam KJ, Bischoff CM, Bradshaw CP (2018). Promoting educators' use of culturally responsive practices: A systematic review of in-service interventions. *Journal of Teacher Education* 69(4):367-385.
- Bourn D (2016). Teachers as agents of social change. *International Journal of Development Education and Global Learning* 7(3):63-77.
- Braun V, Clarke V (2006). Using thematic analysis in psychology. *Qualitative research in psychology* 3(2):77-101
- Braun V, Clarke V (2012). Thematic analysis. *American Psychological Association*.
- Chase SE (2011). Narrative inquiry. In N. K. Denzin & Y. Lincoln (eds.), *The Sage handbook of qualitative research* (4th Ed.). Thousand Oaks, CA: Sage.
- Chang-Kredl S, Kingsley S (2014). Identity expectations in early childhood teacher education: Pre-service teachers' memories of prior experiences and reasons for entry into the profession. *Teaching and Teacher Education* 43:27-36.
- Clausen JM, Borthwick AC, Rutledge DW, Walker BB (2023). Perspectives of Educational Technology Teacher Educators: Mavericks, Champions, or Change Agents? *Journal of Digital Learning in Teacher Education* 39(1):21-40.
- Costa S, Pirchio S, Shevchuk A, Glock S (2023). Does teachers' ethnic bias stress them out? The role of teachers' implicit attitudes toward and expectations of ethnic minority students in teachers' burnout. *International Journal of Intercultural Relations* 93:101757.
- Creswell JW, Poth CN (2018). *Qualitative Inquiry and research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Datnow A (2020). The role of teachers in educational reform: A 20-year perspective. *Journal of Educational Change* 21(3):431-441.
- de Silva RM, Gleditsch R, Job C, Jesme S, Urness B, Hunter C (2018).

- Gloria Ladson-Billings: Igniting student learning through teacher engagement in culturally relevant pedagogy. *Multicultural Education* 25:23-28.
- Erikson F, Mohatt G (1982). Cultural organization of participation structures in two classrooms of Indian students in *Doing the ethnography of schooling*, Spindler éd, New York: Holt, Rinehart and Winston.
- Estellés M, Fischman GE (2021). Who needs global citizenship education? A review of the literature on teacher education. *Journal of Teacher Education* 72(2):223-236.
- Ewing R, Manuel JV (2005). Retaining quality early career teachers in the profession: new teacher narratives [An earlier version of this paper was presented at the Australian Teacher Education Association Conference July 2004 Bathurst NSW.]. *Change (Sydney NSW)* 8(1):1-16.
- Fantini AE (2012). Assessing Intercultural Competence. In Jackson, J. (Ed.), *The Routledge Handbook of Language and Intercultural Communication* (pp 263-279). New York: Routledge.
- Gav G (1993). Building Cultural Bridges: A Bold Proposal for Teacher Education. *Education and Urban Society* 25(3):285-299.
- Gay G, Howard TC (2000). Multicultural teacher education for the 21st century. *The Teacher Educator* 36(1):1-16.
- Gee JP (2001). Identity as an analytic lens for research in education. In WG Secada (Ed.) *Review of research in education* 25:99-125. Washington DC: American Educational Research Association.
- Halliday MAK, Hasan R (1989). *Language, Context, and Text: Aspects of language in a Social-Semiotic Perspective* (2nd Ed.) Oxford University Press.
- Ho STK (2009). Addressing Culture in EFL Classrooms: The Challenge of Shifting from a Traditional to an Intercultural Stance. *Electronic Journal of Foreign Language Teaching* 6:63-76.
- Howard S, Johnson B (2004). Resilient teachers: Resisting stress and burnout. *Social Psychology of Education* 7(4):399-420.
- Johnson B, Dow n B, Le Cornu R, Peters J, Sullivan A, Pearce J, Hunter J (2014). Promoting early career teacher resilience: A framework for understanding and acting. *Teachers and Teaching* 20(5):530-546.
- Kimmelman N, Lang J (2019). Linkage within teacher education: cooperative learning of teachers and student teachers. *European Journal of Teacher Education* 42(1):52-64.
- Kleinfeld J (1992). Learning to think like a teacher: The study of cases. In J. Shulman (Ed.) *Case methods in teacher education* (pp. 33-49). New York: Teachers College Press.
- Knowles JG (1992). Models for understanding preservice and beginning teachers' biographies: illustrations from case studies in: IF Goodson (Ed.) *Studying Teachers' Lives* (pp. 99-152). New York: Teachers College Press.
- King J, Ladson-Billings G (1990). The teacher education challenge in elite university settings: Developing critical perspectives for teaching in a democratic and multicultural society. *European Journal of Intercultural Studies* 1:15-30.
- Ladson-Billings G (1994). What we can learn from multicultural education research. *Educational Leadership* 51(8):22-26.
- Ladson-Billings G (1995). Toward a Theory of Culturally Relevant Pedagogy. *American Educational Research Journal* 32(3):465-491.
- Ladson-Billings G (2009). *The dreamkeepers: Successful teachers of African-American children* (2nd Ed.). San Francisco: CA: Jossey-Bass.
- Le Cornu R (2009). Building resilience in pre-service teachers. *Teaching and Teacher Education* 25(5):717-723.
- Le Cornu R (2013). Building early career teacher resilience: The role of relationships. *Australian Journal of Teacher Education* (Online) 38(4):1-16.
- Ledger S (2021). Resilience building for pre-service teachers: BRITE, micro-teaching and augmented reality/simulation (BRITE-AR). *Cultivating Teacher Resilience*, p. 245.
- Lipman P (1993). The influence of restructuring on teachers' beliefs about and practices with African American students. Unpublished doctoral dissertation, University of Wisconsin Madison. Retrieve from www.scholar.google.com
- Liu K, Ball AF (2019). Critical reflection and generativity: Toward a framework of transformative teacher education for diverse learners. *Review of Research in Education* 43(1):68-105.
- Lutovac S, Assuncao FM (2021). 'Those who fail should not be teachers': Pre-service Teachers' Understandings of Failure and Teacher Identity Development. *Journal of Education for Teaching* 47(3):379-394.
- McCarthy CJ, Dillard J, Fitchett PG, Boyle L, Lambert RG (2023). Associations between teacher-student racial/ethnic congruence and public-school teachers' risk for stress. *Urban Education* 58(5):931-958.
- Madiqan DJ, Kim LE (2021). Does teacher burnout affect students? A systematic review of its association with academic achievement and student-reported outcomes. *International Journal of Educational Research* 105:101714.
- Mansfield C, Beltman S (2019). Promoting resilience for teachers: pre-service and in-service professional learning. *The Australian Educational Researcher* 46(4):583-588.
- Masten AS, Best KM, Garmezy N (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology* 2(4):425-444.
- Maybin CB (2019). Disrupting the status quo: Educating pre-service music teachers through culturally relevant pedagogy. *Journal of Popular Music Education* 3(3):469-485.
- McKay L, Manning H (2019). Do I Belong in the Profession? The Cost of Fitting In as a Preservice Teacher With a Passion for Social Justice. *Journal of Teacher Education* 70(4):360-371.
- McKay L, Riley T, King J, Bamford-Mareroa A, Licence S (2023). Navigating a pathway of professional learning: Travelling the Hero's journey with first year pre-service teachers. *Teaching and Teacher Education* 122:103973.
- Mitchell R, Myles F (2004). *Second language learning theories* (2nd Ed.). London: Arnold.
- Moran PR, Lu Z (2001). *Teaching culture: Perspectives in practice* (pp. 34-47). Boston: Heinle & Heinle.
- Nias J (1989). Teaching and the self. In M. L. Holly, & C. S. McLoughlin (Eds.), *Perspective on teacher professional development* (pp. 151-171). London: Falmer Press.
- Noordhoff K, Kleinfeld J (1991). Preparing teachers for multicultural classrooms: A case study in rural Alaska. Paper presented at the Annual Meeting of the American Educational Research Association, Chicago.
- O'Leary ES, Shapiro C, Toma S, Sayson HW, Levis-Fitzgerald M, Johnson T, Sork VL (2020). Creating inclusive classrooms by engaging STEM faculty in culturally responsive teaching workshops. *International Journal of STEM Education* 7:1-15.
- O'Keefe L, Paige K, Osborne S (2019). Getting started: Exploring pre-service teachers' confidence and knowledge of culturally responsive pedagogy in teaching mathematics and science. *Asia-Pacific Journal of Teacher Education* 47(2):152-175.
- Pantić N, Florian L (2015). Developing teachers as agents of inclusion and social justice. *Education Inquiry* 6(3):27311.
- Pressley T (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher* 50(5):325-327.
- Pretsch J, Flunger B, Schmitt M (2012). Resilience predicts well-being in teachers, but not in non-teaching employees. *Social Psychology of Education* 15:321-336.
- Riessman CK (2005). Narrative analysis. In *Narrative, memory and everyday life* (pp. 1-7). Huddersfield, UK: University of Huddersfield.
- Rodríguez-Abitia G, Ramirez-Montoya MS, Martínez-Pérez S, López-Caudana EO (2023). Cultural differences in complexity reasoning in higher education. In *Proceedings TEEM 2022: Tenth International Conference on Technological Ecosystems for Enhancing Multiculturality: Salamanca Spain October 19-21 2022* (pp.440-447). Singapore: Springer Nature Singapore.
- Samuels AJ (2018). Exploring Culturally Responsive Pedagogy: Teachers' Perspectives on Fostering Equitable and Inclusive Classrooms. *Slate Journal* 27(1):22-30.
- Sleeter CE (2011). An agenda to strengthen culturally responsive pedagogy. *English teaching: Practice and Critique* 10(2):7-23.
- Strasser J (2023). Germany: Professional Networks of Minority Teachers and Their Role in Developing Multicultural Schools. In *To Be a Minority Teacher in a Foreign Culture: Empirical Evidence from an International Perspective* (pp. 139-156). Cham: Springer International Publishing.
- Tait M (2008). Resilience as a contributor to novice teacher success,

- commitment, and retention. *Teacher Education Quarterly* 35(4):57-75.
- van Huizen P, van Oers B, Wubbels T (2005). A Vygotskian perspective on teacher education. *Journal of Curriculum Studies* 37(3):267-290.
- Young TJ, Sachdev I (2011). Intercultural communicative competence: Exploring English language teachers' beliefs and practices. *Language Awareness* 20(2):81-98.
- Weatherby-Fell N, Duchesne, S, Neilsen-Hewett C (2019). Preparing and supporting early childhood pre-service teachers in their Professional Journey. *The Australian Educational Researcher* 46(4):621-637.
- Weatherby-Fell N, Neilsen-Hewett C, Duchesne S (2020). Building Resilience for Early Years Teachers. *Cultivating Teacher Resilience: International Approaches Applications and Impact* 51-67.
- Wingfield ME, Freeman L, Ramsey J (2000). Science Teaching Self-Efficacy of First Year Elementary Teachers Trained in a Site Based Program. Retrieved from www.scholargoogle.com

APPENDIX

Narrative frame for language and culture course

1. My journey with Language and Culture Course was like...This is because....
2. What I really enjoy while analyzing different cultures from all around the world is that...For example...
3. The socio-cultural analysis of different cultures in Language and Culture course made me develop insights about / an understanding of... For example...
4. If pre-service teachers' predictions were not compatible with culturally diverse classrooms...
I think...
5. If you wish, please tell me another story about your experiences in Language and Culture Course

Related Journals:

