

Abusive Supervision and Work-Family Conflict: The Mediating Role of Emotional Exhaustion

Sanqing Wu, Kai Cao

Management School of Jinan University, Guangzhou, China
Email: caokay@yeah.net

Received 29 October 2015; accepted 29 November 2015; published 2 December 2015

Copyright © 2015 by authors and Scientific Research Publishing Inc.
This work is licensed under the Creative Commons Attribution International License (CC BY).
<http://creativecommons.org/licenses/by/4.0/>



Open Access

Abstract

Building on the theoretical foundation of conservation of resources theory, we investigated the mediating role of the emotional exhaustion in the relationship between abusive supervision and work-family conflict. Using a sample of 339 employees from south of China, we examined the direct and indirect relationship between abusive supervision and work-family conflict. The result shows that abusive supervision influences work-family conflict and the relationship is partially mediated through emotional exhaustion. Theoretical and practical implications are discussed.

Keywords

Abusive Supervision, Emotional Exhaustion, Work-Family Conflict

1. Introduction

In recent years, destructive leadership behavior has become an important research object of leadership behavior. Abusive supervision, a typical form of destructive leadership behavior, is defined as “subordinates’ perceptions of the extent to which leaders engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000) [1]. Typical examples of abusive supervision are having loud and angry tantrums, giving public criticism, giving the silent treatment, and coercing others (Aryee, Chen, Sun, & Debrah, 2007; Hoobler & Brass, 2006; Tepper, 2000; Tepper, Carr, Breaux, Geider, Hu, & Hua, 2009) [1]-[4]. In the situation of China’s high power distance, abusive supervision is quite a common phenomenon. However, the research on abusive supervision in China is limited.

Abusive supervision has showed to impact on organizational citizenship behavior (Rafferty & Restubog, 2011) [5], job performance (Tepper, Moss, & Duffy, 2011) [6], employee creativity (Liu & Liao, 2012) [7], increased

workplace deviance (Mitchell & Ambrose, 2007) [8] and intention to leave, which are outcomes within the organization. The fallout of abusive supervision outside the organization on family has also attracted much attention in recent years. Researchers have found that abusive supervision has destructive influence on employee well-being, the condition of health, depression and family satisfaction. While the balance of work and family is also the hot project in research, it is urgent to analyze the mechanism between abusive supervision and work-family conflict.

The purpose of this paper is to explore the relationship between abusive supervision with the mediating role of emotional exhaustion. This paper contributes to the literature in three ways. First, it extends the outcome outside the organization in family domain. The result shows that abusive supervision is positive related to work-family conflict outside the organization, which is known to lead to poor outcomes in both the work and family domains. Second, the mediating role of emotional exhaustion is verified with the new perspective of conservation of resources theory. Abused subordinates are found to be exhausted and resources are drained. Finally abused subordinates find themselves in work-family conflict. At last, the study aroused the attention of managers to reduce abusive behavior. Understanding how abuse may lead to work-family conflict help managers to adopt proper behaviors to their subordinates.

2. Literature Review

2.1. Abusive Supervision

Abusive supervision is defined as “subordinates’ perceptions of the extent to which leaders engage in the sustained display of hostile verbal and nonverbal behaviors, excluding physical contact” (Tepper, 2000) [1]. Abusive supervision is recognized as the source of stress. With the perspective of justice theory, Tepper (2000) proved that abusive supervision was associated with subordinates’ lower job and life satisfaction, lower affective commitment, higher conflict between work and family, and psychological distress (Tepper, 2000). It is also proved that abusive supervision has destructive affect on subordinates’ family life, such as the relationship tension, lower family functioning and work-family conflict (Hoobler & Brass, 2006; Carlson, Ferguson, Perrewé, & Whitten, 2011) [6] [9].

Some researchers have analyzed the effects outside the organization. Carlson *et al.* (2011) [9] found that abusive supervision has a positive relationship with work-family conflict and relationship tension. Carlson *et al.* (2012) [10] found further support for the relationship between abuse perceptions and work-family conflict, mediated by job burnout. Hoobler & Brass (2006) [6] found that the abused subordinates’ family members would report constant negative affect from abused subordinates in home. In those papers, conservation of resources theory (COR) is adopted to better explain the fallout of abusive supervision.

COR theory suggests that people strive to retain, protect, and build resources that are useful for their goals, and that what is threatening to them is the potential or actual loss of these valued resources (Hobfoll, 1989) [11]. Hobfoll defined resources as those objects, personal characteristics, conditions, or energies that are valued and cherished by individuals. Conditions are resources to the extent that they are valued and sought. Married tenure and status are examples. Personal characteristics are resources which can be used to resist stress. Self-esteem is a kind of personal characteristics resources. Energies resources include resources such as time, money and knowledge. People experience stress when they feel an actual or threatened loss of resources. COR provides a new attempt to conceptualizing stress and is mainly replied in the management of stress. Grandey & Cropanzano (1999) [12] assessed the relationships of work and family stressors with outcomes of work, family, and life distress, physical health, and turnover intentions.

2.2. Work-Family Conflict

Work-family conflict is defined as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985) [13]. The construct of work-family conflict is divided into work-to-family conflict and family-to-work conflict (Grzywacz & Marks, 2000) [14]. Abused subordinates are more likely to report work-family conflict (Tepper, 2000; Carlson, 2011; Carlson, 2012) [1] [9] [11]. In this paper, we emphasized the process from work to family. Thus, when we refer work-family conflict, it is referred to work-to-family conflict.

Based on COR theory, we suppose that subordinates experiencing abusive supervision may believe they cannot perform the job successfully. At the same time, abusive supervision also means the loss of leadership sup-

port. Thus, they may experience the threat of potential and actual loss resources and fear losing their job which is also valued resources for them. Consequently, they may be forced to put more effort and invest more resources into the work domain, hoping to reduce the suffering from abusive supervision. Investing more time and energy into work tends to take away time and energy from abusive subordinates at home (Grandey & Cropanzano, 1999). When their resources are lost in work domain, there are little resources left for family domain. The work role interfere the family domain and the work-family conflict appears. This potential or actual loss of resources caused by abusive supervision may lead to work-family conflict.

Prior researchers also have made empirical study on the relationship between abusive supervision and work-family conflict. Tepper (2000) [1] had found a positive link between abusive supervision and work-family conflict. Carlson *et al.* (2011) [9] found that abusive supervision has a positive relationship with work-family conflict and relationship tension. Carlson *et al.* (2012) [10] found further support for the relationship between abuse perceptions and work-family conflict, mediated by job burnout. Hoobler & Brass (2006) [6] found that the abused subordinates' family members would report constant negative affect from abused subordinates in home. Thus, we propose our first hypothesis.

H1: Abusive supervision is positively related to work-family conflict.

2.3. Emotional Exhaustion

Emotional exhaustion describes the state of being emotionally overextended and exhausted by one's work (Maslach & Jackson, 1981) [15]. Emotional exhaustion is one of the three subscales from burnout. The three subscales of burnout are emotional exhaustion, depersonalization, and personal accomplishment. The stress is the main cause for emotional exhaustion. As their emotional resources are depleted, workers feel they are no longer able to relax and they are definitely stressful.

Conservation of resources is a useful framework to explain how individuals respond to chronic work stress. Individuals who experience emotional exhaustion also experience the loss of valued resources due to ongoing stress and excessive job demands. Abusive supervision which is seen as a workplace stressor, has been found a link to emotional exhaustion. Prior research has proved that abusive supervision is positively associated with emotional exhaustion (Aryee *et al.*, 2008; Wu & Hu, 2009; Tepper, 2000; Chi & Liang, 2013; Whitman & Halbesleben, 2014) [2] [16]-[18]. Abusive supervision means a loss of leadership support. Abused subordinates suffer from the actual loss of this valued resource and become stressful, leaving them without enough resources to handle the stress, ultimately resulting in emotional exhaustion. We therefore expect that subordinates abused by their supervisors are likely to experience emotional exhaustion at work. Therefore, we hypothesize the following second thesis:

H2: Abusive supervision is positively related to emotional exhaustion.

2.4. The Mediating Role of Emotional Exhaustion

When subordinates are abused by their supervisor, they are suffering from the bad condition caused by the interpersonal interaction. They may experience low energy and mental fatigue and feel stressful, resulting in emotional exhaustion. Individuals may invest more resources to cope with the abusive supervisor and meet the demands in the workplace. Once their resources are depleted in workplace, it is likely that their resources to allocate in family domain are used up. Ultimately, they are likely to experience work-family conflict.

Based on COR theory, abusive supervision is the source of stressor and the loss of leadership support in the interpersonal interaction. Abused subordinates become stressful and leave low energy to handle the stress, resulting in emotional exhaustion. Exhausted subordinates deplete their resources into work and leave no enough resources for family, leading to work-family conflict. Thus, we propose that emotional exhaustion as a mediator in the relationship between abusive supervision and work-family conflict as following:

H3: The relationship between abusive supervision and work-family conflict is partially mediated through emotional exhaustion.

The theoretical framework of this paper is demonstrated in **Figure 1** with all the hypotheses above.

3. Research Methodology

3.1. Sample

We collected data from employees with two methods. The first method is to distribute questionnaires to MBA

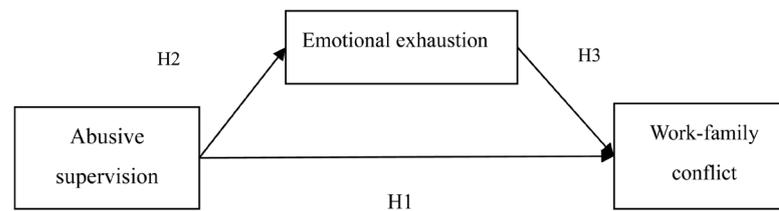


Figure 1. The theoretical framework of this research.

students in universities. The second method is through personal relationship. The relationships are managers of companies to help us to collect data in their companies. The questionnaires are self-reported by employees with five-point Likert scales. In order to avoid common method biases, the participants are informed that the data collection is only for academic research. At the same time, all the participants signed informed consent prior to data collection. The resources of respondents are from enterprises in Guangzhou, Shenzhen, Foshan in the south of China. We distribute 360 questionnaires in total and eliminate 21 invalid questionnaires and finally collect 339. The response rate is 94.2%. There are 46.3% male employees in the subordinate sample, 25.7% married and 20% had children living with them. There are 58.7% respondents are below 25 years old. In terms of subordinate education, 12.1% had a high school diploma, 13.9% an associate's degree, 58.7% a bachelor's degree, 15.3% a master's degree or a doctor degree.

3.2. Measures of Variables

3.2.1. Abusive Supervision

To measure abusive supervision, we adopted the scale developed by Tepper (2000) with 15 items. Respondents used a five-point Likert scale ranging from 1 (never) to 5 (very often). The scale asks in the first place "How often does your supervisor use the following behaviors with you?" Examples of the scale are "Gives me the silent treatment", "Puts me down in front of others" and "Makes negative comments about me to others". The Cronbach alpha for this scale was 0.97.

3.2.2. Work-Family Conflict

We used the scale developed by Carlson, Kacmar, and Williams (2000) [19] and take the strain-based form of the scale. Respondents used a five-point Likert scale asking which the extent of how they agree with the statement ranging from 1 (strongly disagree) to 5 (strongly agree). A sample item is "When I get home from work I am often too frazzled to participate in family activities/responsibilities". The Cronbach alpha for this scale was 0.93.

3.2.3. Emotional Exhaustion

We employed the scale developed by Maslach and Jackson (1981) and there are 6 items to measure emotional exhaustion. Respondents use a five-point Likert scale ranging from 1 (never) to 5 (very often). An example item is "I felt burned out from my work". The Cronbach alpha for this scale was 0.78.

3.2.4. Control Variables

We controlled basic background variables and the negative affect as our control variables. Because the basic background variables like gender and marital status are proved to be related to work-family conflict, we controlled gender and marital status. Some researchers verified that employees with negative affect tend to perceive more abusive behavior from supervisors and negative affect is found to influence work-family conflict. Thus, we controlled negative affect as control variables. The scale of negative affect is assessed by the 10-item PANAS scale (Watson, Clark, & Tellegen, 1988) [20]. This scale consists of a number of words that describe feeling and emotions. Indicate to what extent you feel the emotions (1 = very slightly or not at all, 2 = a little, 3 = moderately, 4 = quite a bit, 5 = extremely). There are 10 words to describe such as "Hostile", "Distressed". The Cronbach alpha for this scale was 0.96.

3.3. Procedure

First of all, to examine whether there are common method biases, we conducted Harman test. We did both ex-

ploratory factor analysis and confirmatory factor analysis. Secondly, to analyze the relationship between variables, coefficients of correlation of the variables are examined. At last, hierarchical regression analyses were used to examine the relationship between variables in this paper. In order to figure out the relationship between abusive supervision and work-family conflict, a simple regression model is established taking the work-family conflict as the dependent variable, abusive supervision as the independent variable.

4. Results

4.1. Common Method Biases

Taking the data which are collected by self-report scales into account, there may be common method biases. To find out whether there are common method biases, we conducted Harman test. Firstly, we did exploratory factor analysis and in the situation without rotating, there are seven factors. And the variance of first factor only explained 27.11% in total, which shows that there is no serious problem of common method biases. In addition, we did confirmatory factor analysis and the results show that the factorial model ($\chi^2/df = 3.879$; CFI = 0.871; GFI = 0.815; RMSEA = 0.078) consisted of independent variables and mediated variables has a good fitting effect, which is far better than the fitting effect of single factor model ($\chi^2/df = 7.795$; CFI = 0.694; GFI = 0.631; RMSEA = 0.142). In conclusion, there is no serious problem of common method biases.

4.2. Correlations of Abusive Supervision, Emotional Exhaustion and Work-Family Conflict

Table 1 shows the descriptive statistics and Pearson correlation between variables. Mean, standard deviation and coefficient of correlation of the variables are shown in **Table 1**. The data from **Table 1** demonstrates that abusive supervision, emotional exhaustion and work-family conflict were significant under the level of 0.01. It is proved that there is significant positive correlation between those variables. In additional, all of correlations between variables are significant which support H1.

4.3. Test of Hypothesis

Hierarchical regression analyses were used to examine the relationship between variables in this paper. The results are displayed in **Table 2**. In order to figure out the relationship between abusive supervision and work-family conflict, a simple regression model is established taking the work-family conflict as the dependent variable, abusive supervision as the independent variable. The result tells that the relationship is significant (model 2 in **Table 2**, correlation coefficient 0.30), which proved that abusive supervision is positively related to work-family conflict. The H1 is supported. The model 6 in **Table 2** explains the positive relationship between abusive supervision and emotional exhaustion (model 2 in **Table 2**, correlation coefficient 0.30). The H2 is verified.

Emotional exhaustion is the mediator in the relationship between abusive supervision and work-family conflict. To test the mediating role, there are four steps: the first step is to check whether the independent variable affects the mediator. Next step is to test whether mediating variables affect dependent variables. Thirdly, check whether independent variable is related to the dependent variable. When taking the mediator into consideration,

Table 1. Correlations, means, standard deviations.

	Mean	SD	Gender	Marital status	Negative affect	Abusive supervision	Emotional exhaustion	Work-family conflict
Gender	0.5369	0.49	1					
Marital status	0.2566	0.43	0.180**	1				
Negative affect	2.3097	0.81	-0.016	-0.123*	1			
Abusive supervision	1.9371	0.69	-0.049	-0.110*	0.577**	1		
Emotional exhaustion	2.6858	0.86	-0.098	-0.086	0.589**	0.553**	1	
Work-family conflict	2.2212	0.65	-0.079	-0.033	0.555**	0.522**	0.566**	1

Note: ** $p < 0.01$, * $p < 0.05$.

Table 2. The results of hierarchical regression (N = 339).

Variables	Work-family conflict			Emotional exhaustion			
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	
Control variables	Gender	0.07	0.07	0.05	0.05	0.09	0.08
	Marital status	0.05	0.06	0.05	0.06	0.01	0.01
Independent variables	Negative affect	0.56**	0.38**	0.348	0.27**	0.59**	0.40**
	Abusive supervision		0.30**		0.21**		0.32**
Mediated variables	Emotional exhaustion			0.36**	0.30**		
	F value	51.42	51.41	55.50	49.29	61.26	60.60
	R square	0.32	0.37	0.40	0.43	0.36	0.42
	Adjusted R square	0.31	0.36	0.40	0.43	0.35	0.41

the last step is to find out the influence degree of the independent variable on the dependent variable is weakened or strengthened.

Table 2 shows the results. The first step, in model 2, the coefficient between abusive supervision and work-family conflict is 0.30, which is at the significant level. The second step is in model 3, the coefficient between emotional exhaustion and work-family conflict is 0.36, supporting the positive relationship in mediator and dependent variables. Thirdly, in model 6, abusive supervision is positively related to emotional exhaustion (coefficient 0.32). At last, when the independent variable and mediator are all in the regression model, the coefficient of abusive supervision on work-family conflict dropped from 0.30 to 0.21. It can be concluded that emotional exhaustion is partially mediate the relationship between abusive supervision and work-family conflict.

5. Discussions

The main objective of this research is to investigate the relationship between abusive supervision and work-family conflict and examine the mediating role of emotional exhaustion. According to the research, hypotheses are verified and some useful findings are discussed in the following paper. We found that emotional exhaustion mediated the relationship between abusive supervision and work-family conflict.

5.1. Theoretical Implications

Our study extends prior research and contributes to the abusive supervision literature in the following ways. First, our research explores the effects of abusive supervision outside the organizations and has found out the direct relationship between abusive supervision and work-family conflict. Previous research has concentrated on the outcomes in work domain, such as organizational citizenship behavior (Rafferty & Restubog, 2011), job performance (Tepper, Moss, & Duffy, 2011), increased workplace deviance (Mitchell & Ambrose, 2007) and intention to leave. Prior research have proved that abused employees cannot express their depression to their supervisors within the organization due to the norms and regulations, however, they would express their true feeling and revenge to his family, which is called kick the dog (Hoobler & Brass, 2006). Our research investigated the influence in work-family conflict. Based on conservations of resources theory, abused subordinates suffered from the loss of leadership support and need invest more resources into work domain and leave no time and energy for their family. As a result, abusive supervision has a positive relationship with work-family conflict.

Second, the mediated role of emotional exhaustion between the abusive supervision and work-family conflict is also analyzed in this study. Based on COR theory, the abused employees can feel stressful by the bad condition with their supervisors. They may experience low energy and mental fatigue, resulting in emotional exhaustion. On the other hands, they may invest more resources to meet the demands in the workplace and drain their resources for family. As conclusion, abusive supervision depletes subordinates' emotional resources, resulting in

work-family conflict.

5.2. Practical Implications

The study also has some practical implications for practitioners and organizations. The finding that abusive supervision leads to emotional exhaustion and finally resulting in work-family conflict should give significant warnings to organizations that abusive behaviors from supervisors cannot be tolerated in the organizations. Organizations must take abusive supervision seriously into account, and emphasizes the negative effects within and outside the organization on the abused subordinates. On the other hands, organizations should pay attention to abused employees and encourage them to seek support from the organization to avoid emotional exhaustion, which is part of burnout. As for supervisors, they must raise their awareness of the negative effect of abusive behaviors. At last, abused subordinates need to pay more attention to abusive supervision and seek support from organization, trying to avoid work-family conflict.

6. Limitation and Future Research

However, there are still some limitations in this research. First, the data are collecting from self-reporting questionnaires. There may be common method biases. In the future research, it could be improved by collecting longitudinal data. Second, the scales we adopted in this study are developed in western culture background and organizational situations. Though the abusive supervision scale is pervasive and valid in China, there is still urgent to develop a new measurement based on Chinese culture.

In conclusion, this research demonstrates that abusive supervision is positively related to work-family conflict partially through the emotional exhaustion. For future research, researchers may find out other path for abusive supervision to work-family conflict. Abusive supervision may cause the road to emotional contagion and finally bring the bad emotion into family life, resulting in work-family conflict. At the same time, researcher may extend the research on how abusive supervision affects employees' actions and behaviors, such as employee voices and retaliatory behaviors.

References

- [1] Tepper, B.J. (2000) Consequences of Abusive Supervision. *Academy of Management Journal*, **43**, 178-190. <http://dx.doi.org/10.2307/1556375>
- [2] Aryee, S., Sun, L.Y., Chen, Z.X.G. and Debrah, Y.A. (2008) Abusive Supervision and Contextual Performance: The Mediating Role of Emotional Exhaustion and the Moderating Role of Work Unit Structure. *Management and Organization Review*, **4**, 393-411. <http://dx.doi.org/10.1111/j.1740-8784.2008.00118.x>
- [3] Hoobler, J.M. and Brass, D.J. (2006) Abusive Supervision and Family Undermining as Displaced Aggression. *Journal of Applied Psychology*, **91**, 11-25. <http://dx.doi.org/10.1037/0021-9010.91.5.1125>
- [4] Tepper, B.J., Carr, J.C., Breaux, D.M., Geider, S., Hu, C. and Hua, W. (2009) Abusive Supervision, Intentions to Quit, and Employees' Workplace Deviance: A Power/Dependence Analysis. *Organizational Behavior and Human Decision Processes*, **109**, 156-167. <http://dx.doi.org/10.1016/j.obhdp.2009.03.004>
- [5] Rafferty, A.E. and Restubog, S.L.D. (2011) The Influence of Abusive Supervisors on Followers' Organizational Citizenship Behaviours: The Hidden Costs of Abusive Supervision. *British Journal of Management*, **22**, 270-285. <http://dx.doi.org/10.1111/j.1467-8551.2010.00732.x>
- [6] Tepper, B.J., Moss, S.E. and Duffy, M.K. (2011) Predictors of Abusive Supervision: Supervisor Perceptions of Deep-Level Dissimilarity, Relationship Conflict, and Subordinate Performance. *Academy of Management Journal*, **54**, 279-294. <http://dx.doi.org/10.5465/AMJ.2011.60263085>
- [7] Liu, D., Liao, H. and Loi, R. (2012) The Dark Side of Leadership: A Three-Level Investigation of the Cascading Effect of Abusive Supervision on Employee Creativity. *Academy of Management Journal*, **55**, 1187-1212. <http://dx.doi.org/10.5465/amj.2010.0400>
- [8] Mitchell, M.S. and Ambrose, M.L. (2007) Abusive Supervision and Workplace Deviance and the Moderating Effects of Negative Reciprocity Beliefs. *Journal of Applied Psychology*, **92**, 1159. <http://dx.doi.org/10.1037/0021-9010.92.4.1159>
- [9] Carlson, D.S., Ferguson, M., Perrewe, P.L. and Whitten, D. (2011) The Fallout from Abusive Supervision: An Examination of Subordinates and Their Partners. *Personnel Psychology*, **64**, 937-961. <http://dx.doi.org/10.1111/j.1744-6570.2011.01232.x>

- [10] Carlson, D., Ferguson, M., Hunter, E. and Whitten, D. (2012) Abusive Supervision and Work-Family Conflict: The Path through Emotional Labor and Burnout. *The Leadership Quarterly*, **23**, 849-859. <http://dx.doi.org/10.1016/j.leaqua.2012.05.003>
- [11] Hobfoll, S.E. (1989) Conservation of Resources: A New Attempt at Conceptualizing Stress. *American Psychologist*, **44**, 513. <http://dx.doi.org/10.1037/0003-066X.44.3.513>
- [12] Grandey, A.A. and Cropanzano, R. (1999) The Conservation of Resources Model Applied to Work-Family Conflict and Strain. *Journal of Vocational Behavior*, **54**, 350-370. <http://dx.doi.org/10.1006/jvbe.1998.1666>
- [13] Greenhaus, J.H. and Beutell, N.J. (1985) Sources of Conflict between Work and Family Roles. *Academy of Management Review*, **10**, 76-88.
- [14] Grzywacz, J.G. and Marks, N.F. (2000) Reconceptualizing the Work-Family Interface: An Ecological Perspective on the Correlates of Positive and Negative Spillover between Work and Family. *Journal of Occupational Health Psychology*, **5**, 111. <http://dx.doi.org/10.1037/1076-8998.5.1.111>
- [15] Maslach, C. and Jackson, S.E. (1981) The Measurement of Experienced Burnout. *Journal of Organizational Behavior*, **2**, 99-113. <http://dx.doi.org/10.1002/job.4030020205>
- [16] Wu, T.Y. and Hu, C. (2009) Abusive Supervision and Employee Emotional Exhaustion Dispositional Antecedents and Boundaries. *Group & Organization Management*, **34**, 143-169. <http://dx.doi.org/10.1177/1059601108331217>
- [17] Chi, S.C.S. and Liang, S.G. (2013) When Do Subordinates' Emotion-Regulation Strategies Matter? Abusive Supervision, Subordinates' Emotional Exhaustion, and Work Withdrawal. *The Leadership Quarterly*, **24**, 125-137. <http://dx.doi.org/10.1016/j.leaqua.2012.08.006>
- [18] Whitman, M.V., Halbesleben, J.R. and Holmes, O. (2014) Abusive Supervision and Feedback Avoidance: The Mediating Role of Emotional Exhaustion. *Journal of Organizational Behavior*, **35**, 38-53. <http://dx.doi.org/10.1002/job.1852>
- [19] Carlson, D.S., Kacmar, K.M. and Williams, L.J. (2000) Construction and Initial Validation of a Multidimensional Measure of Work-Family Conflict. *Journal of Vocational Behavior*, **56**, 249-276. <http://dx.doi.org/10.1006/jvbe.1999.1713>
- [20] Watson, D., Clark, L.A. and Tellegen, A. (1988) Development and Validation of Brief Measures of Positive and Negative Affect: The PANAS Scales. *Journal of Personality and Social Psychology*, **54**, 1063. <http://dx.doi.org/10.1037/0022-3514.54.6.1063>