

Research on Emotional Labor and Influencing Factors based on Visual Analysis

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Abstract: Information visualization is one of the data mining methods that have emerged in recent years. It can use the ability of humans to obtain models and structures in the form of visualization to solve the problem of excessive literature and cannot be processed quickly. It can filter and process data, and find information hidden behind the data. Therefore, this article uses the citespace software developed by Jie Li and Chaomei Chen, With the theme of “emotional labor”, all the documents from 2000 to 2021 were downloaded from the web of science database, and the keywords of this topic were visually analyzed to obtain a keyword co-occurrence map. The result shows that the analysis of antecedent variables is the focus of the research on this topic. At the same time, this article reviews the influencing factors and formation mechanism of emotional labor from the perspectives of conservation of resources theory, emotional contagion theory, and social exchange theory, and sorts out representative empirical research to provide new directions and ideas for future related researches.

1 INTRODUCTION

Emotional labor refers to that employees adjust their emotional feelings and expressions in accordance with the requirements of the organization at work (Fang, Wei, Luo, Liu, Shi & Zhan, 2019). In 1983, Hochschild first proposed the concept of emotional labor, but it did not attract too much attention from service managers at that time. It was not until 1993 that Ashforth systematically expounded the impact of emotional labor on service organizations and individual employees that researchers invested a lot of research interest in emotional labor phenomena.


Since the development of emotional labor, relevant research results have been quite rich. The influencing factors of emotional labor are very complex. Due to the differences in research paradigms, different theories often focus on specific influencing factors for research, and they rarely study from the perspective of comprehensive theory. Therefore, this article sorts out a large number of representative empirical studies on emotional labor at home and abroad, and analyzes the influencing factors and generation mechanism of emotional labor

from the multi-dimensional perspectives of resource preservation theory, emotional infection theory, and social exchange theory, and then gives emotional labor The influencing factor model and the future research framework are expected to provide suggestions for future research on emotional labor.

2 CO-OCCURRENCE ANALYSIS OF KEYWORDS IN EMOTIONAL LABOR RESEARCH

In order to understand the hot topics of emotional labor research, download all the documents from 2000 to 2021 in the web of science data. After data cleaning, duplicate and invalid data were deleted, and finally 3913 documents were obtained. Based on the bibliometric method, the keywords of emotional labor research are visualized and analyzed through the citespace software, and the keyword map is finally derived. In the keyword graph, the size of nodes and fonts reflects the frequency of keywords.

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Figure 1: Keyword co-occurrence map.

Table 1: Keyword frequency statistics.

Key Words	Relevant information	
	Number	Frequency
emotional labor	1	986
work	2	737
labor	3	694
burnout	4	514
consequence	5	444
emotional labour	6	383
gender	7	380
performance	8	363
antecedent	9	341
stress	10	337

The larger the node, the more the keywords have been studied. The number of connections indicates the closeness of the relationship with other keywords. Combining Figure 1 and Table 1, it can be seen that the node corresponding to the term "emotional labor" is the largest, with 986 occurrences, and the densest connection with other nodes, which is the core research theme of the field; Secondly, the nodes and labels of words such as work (737 times), labor (694 times), burnout (514 times), and consequence (444) are also relatively large, indicating that the research in the past 20 years has mainly focused on these fields. Among the top 10 keywords in the frequency ranking, keywords related to the pre-dependent variable of emotional labor accounted for 41.55%, keywords related to the outcome variable accounted for 32.01%, and focused on the topic of "emotional labor" itself accounted for 26.05%. The analysis of dependent variables is the focus of this topic research.

3 EMOTIONAL LABOR FROM THE PERSPECTIVE OF CONSERVATION OF RESOURCRS THEORY

In 1989, Hobfoll first systematically proposed the conservation of resources theory (COR). The theory

believes that individuals have the tendency to preserve, protect, and obtain resources. Therefore, whether it is a potential threat of resource loss or actual resource loss, it will cause individual tension and pressure (Hobfoll, 1989. Hobfoll, Halbesleben, Neveu & Westman, 2018). Therefore, employees always try to maintain the existing resources and reduce the loss caused by resource consumption in order to achieve a balance between resource acquisition and consumption. The efforts of employees at work will result in resource loss, and getting paid can supplement resources.

In 2003, Brotheridge and others introduced the conservation of resources theory into the field of emotional labor, and believed that the conservation of resources theory could better explain why emotional labor produces different results. The theory believes that when interpersonal employees perform emotional labor, they need to consume a certain amount of resources, which results in resource loss. If the employee's resource loss is not compensated for in time, it will lead to resource imbalance, and the employee will take to reduce the effort at work measures to maintain the balance of their own resources.

Many domestic and foreign scholars have conducted a large number of empirical studies in the field of emotional labor based on this theory. This research is classified and sorted according to the existing literature, and the results are shown in Table 1. The empirical studies of scholars such as Liu Zhe and scholars such as Wang Zhen have proved that work input positively affects deep acting and true expression (Liu, Yang, Tang, Ma & Li, 2018. Wang & Li, 2013). The empirical studies of Tsung-Yu Wu, Changya Hu, Dawn Carlson and others have shown that abusive management is positively correlated with surface acting (Wu & Hu, 2013. Carlson, Ferguson, Hunter & Whitten, 2012). The research of Tsung-Yu Wu and Changya Hu further proves that plays a negative correlation (Wu & Hu, 2013). It is worth noting that variables such as job input, job satisfaction, and organizational commitment are not only the antecedent variables of emotional labor, but also the result variables of emotional labor.

It can also be seen from the table 1 that the outcome variables of emotional labor are mostly negative variables, which further confirms the connotation of resource conservation theory, that is, emotional labor consumes employees' resources. If the consumed resources are not replenished, employees will reduce their efforts at work, which will have a negative impact on customers and the organization, and employees themselves will also be

caused by resource imbalances. Reactions to emotional exhaustion and stress.

The application of resource preservation theory in the field of emotional labor can also give some suggestions to managers in organizations. First, managers can organize, encourage and support the skills training required for employees to participate in work, and reserve available resources in advance; The second is to create a comfortable working environment and reduce the occurrence of damage to employee resources; The third is that when employees' resources are lost, they should provide effective resource support in a timely manner to avoid further damage to their resources.

4 EMOTIONAL LABOR FROM THE PERSPECTIVE OF EMOTIONAL CONTAGION THEORY

In 1994, Hatfield systematically expounded the emotional contagion theory in his book "Emotional Contagion". The theory believes that emotional infection is a tendency to automatically imitate and synchronize with others' expressions, voices, postures, and actions. As a result, the emotions of the two interacting parties are often aggregated and unified (Hatfield, Cacioppo & Rapson, 1992. Barger & Grandey, 2006). Emotional infection theory provides a good explanation for understanding the emotional interaction process of people in organizational contexts. Emotional infection plays an important role in organizational behavior, leadership, marketing and other fields. Pugh first used the theory of emotional infection to explain the phenomenon of service interaction. Based on the theory of emotional labor, he proposed that when employees interact with customers, customers will subconsciously imitate the emotional expression of employees, and then the customer's own emotions will change (Pugh, 2001).

By combing the existing empirical research using the emotional contagion theory, it can be seen that a large number of existing researches basically discuss the employee-customer relationship individually. However, in fact, the emotions of customers will also affect the emotions of employees, and similarly, the emotions of employees and leaders will also infect each other. However, in fact, the emotions of customers will also affect the emotions of employees, and similarly, the emotions of employees and leaders will also infect each other.

It can be seen that there are still research gaps in the existing empirical research in the field of emotional labor based on the theory of emotional contagion, future research can continue to explore whether the emotions of customers will affect the emotions of employees and the path of influence. Similarly, the emotional contagion between leaders and employees can also be studied.

The enlightenment that this brings to managers is: For the selection of positions that need to deal with customers frequently, managers should select employees with positive emotional expression and high emotional intelligence, so as to bring positive emotional experience to customers and improve customer satisfaction degree.

5 EMOTIONAL LABOR FROM THE PERSPECTIVE OF SOCIAL EXCHANGE THEORY

Social exchange theory was jointly proposed by George Casper Homans, Peter Blau and Richard Emerson. The theory believes that all parties will have valuable things that others want, and the exchanged objects and their quantity are jointly decided by both parties. In the research of social exchange theory in the field of organization, there are mainly two kinds of exchange relationships, namely, the exchange relationship between employees and the organization and the exchange relationship between superiors and subordinates.

According to the review of existing empirical research (it can be seen from the table 2), social exchange theory is mainly applied to the exchange relationship between employees and the organization in the field of emotional labor, and there are few researches on the relationship exchange between superiors and subordinates in the organization. When an organization provides employees with more economic and social emotional resources, employees will feel that they have more obligations to repay the organization, and thus devote more energy to work, in return for the organization's feedback to employees.

Based on this, the managers in the organization should cultivate a view of the mutually beneficial relationship between employees and the organization, so that employees believe that when they devote themselves to the construction of the organization, the organization will also give them back.

6 EMOTIONAL LABOR FROM OTHER THEORETICAL

This part combs the empirical research of emotional labor and its influencing factors from other theoretical perspectives, such as Self-depletion Theory, Relationship Marketing Theory, Optimal Differentiation Theory, Job Demands-resources Model, Emotions as Social Information Theory. The specific results are shown in Table 3.

7 CONCLUSIONS AND RECOMMENDATIONS

In summary, different theoretical perspectives have enriched the research content in the field of emotional labor, and brought many lessons for companies in the service industry. Conservation of resources theory tells leaders to pay attention to protecting employees' resources, and to compensate employees in time when their resources are damaged. The emotional infection theory tells leaders to select employees who express positive emotions and high emotional intelligence when recruiting, and managers themselves must strengthen the expression of positive emotions. Social exchange theory emphasizes the establishment of long-term and rewarding exchange relationships between organizations and employees, as well as between superiors and subordinates. Other

theoretical perspectives have also brought us many useful suggestions.

The research on emotional labor has the following suggestions, we must realize that the breadth and depth of empirical research in the field of emotional labor needs to be improved. The first is that empirical research uses less research on theories, and most empirical research involves multiple theories throughout and cannot integrate a certain theory with empirical research. Secondly, empirical research is mostly concentrated in the service and nursing industries. Others, such as the judge industry that needs to maintain objectivity and fairness at work, and the police industry that maintains serious or even negative sentiments, have less empirical research in such industries. Future research can go to these industries to development correlative research. Third, most of the current empirical researches study the impact of employees' emotional labor on employees, organizations, and customers. Few studies involve the emotional labor of leaders in organizations that affect employees. Every researcher still has a long way to go, and more in-depth work needs to be continued.

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Table 2: List of relevant variables of empirical research on conservation of resources theory.

Distal anterior dependent variables of emotional labor	Individual variables	Autonomous motivation, job satisfaction
	Organizational variables	Service-oriented leadership, transformational leadership
	Situational variables	Display rules, customer irrational behavior
The proximal antecedent variables of emotional labor	Individual variables	Emotional intelligence, work insecurity, work engagement, role characteristics, negative emotions, psychological capital, job satisfaction, workplace mental power
	Organizational variables	Abusive management, organizational commitment
	Situational variables	Emotional display rules, customer impolite behavior
The output of emotional labor	Impacts on individuals	Emotional exhaustion, decreased sense of accomplishment, job satisfaction, absenteeism, work-family conflict, work engagement, salary rate, emotional disorders, psychological disengagement, job performance, stress, employee creativity, employee perception of internal identity, active sabotage behavior, organization Citizenship, turnover intention
	Impacts on customers	Customer service quality, customer satisfaction
	Impacts on the organization	Employee turnover rate, organizational commitment

Table 3: List of relevant variables of empirical research on social exchange theory.

Distal anterior dependent variables of emotional labor	Individual variables	Autonomous motivation, job satisfaction
	Organizational variables	Service-oriented leadership, perceived organizational support, organizational identity
The proximal antecedent variables of emotional labor	Individual variables	Work engagement, psychological empowerment, job satisfaction
	Organizational variables	Leadership style (laissez-faire, transactional, transformational), organizational identity, perceived organizational support, organizational commitment
The output of emotional labor	Impacts on individuals	Organizational citizenship behavior, emotional exhaustion, turnover tendency
	Impacts on customers	Customer orientation, customer satisfaction
	Impacts on the organization	Organizational commitment, employee innovation behavior, organizational recognition

Table 4: Representative empirical studies from different theoretical perspectives.

Theory	Author, year	Object of study	Sample size	Independent variable	Mediating variable	Dependent variable
Self-depletion theory	Liping Yin & Xiangqian Zhang, 2019	Service personnel	990	Surface acting, deep acting	Self-depletion, moral license	Pro-organizational unethical behavior
Relationship Marketing Theory	Yong Yang, Qin Hai Ma, Guowei Tan, & Chunjiang Yang, 2015	Customers of enterprises	321	Deep acting, true expression	Customer identification, emotional value	Customer loyalty
Optimal differentiation theory	Fei Zhou, Qinlan Chen & Meixian He, 2018	Colleague	150	Inclusive leadership	Deep acting	Employee innovation behavior
Job demands-resources model	Xiaoyan Li & Erhua Zhou, 2012	Call center customer representative of mobile company	800	Psychological capital	Surface acting, active/passive deep acting	Job burnout
	Michal Biron & Marc van Veldhoven, 2012	Family and friends of research assistants	254	Mental flexibility	Surface acting	Emotional exhaustion
	Brenda, L S & Elizabeth, A C, 2009	Nurse aides and childcare workers	363	Surface acting, emotional enhancement	/	Job satisfaction, emotional commitment, emotional exhaustion, turnover intention
	Seery, B L, Corrigan, E A & Harpel T, 2008	Nurse aides, childcare workers	347	Surface acting, emotional enhancement	/	Work-family conflict, work-family promotion
Emotions as social information theory	Chen Yang & Jianbiao Li, 2017	College undergraduate	144	Emotional harmony, emotional disorders	Emotional response, performance inference	Work performance
	Tae Won Moon, Won-Moo Hur & Yong Jun Choi, 2018	Hospital staff	268	Perceived leader's true behavior	Subordinates' perception of true leadership, subordinates' recognition and trust in the leader	Work performance

Table 4: Representative empirical studies from different theoretical perspectives (cont.).

Theory	Author, year	Object of study	Sample size	Independent variable	Mediating variable	Dependent variable
Customer identity theory	Yong Yang, Qin Hai Ma, Chen Pan Chen & Man Li, 2017	Employees and customers of companies in the beauty, insurance, catering and other industries	352	Deep acting, true expression	Emotional value	Customer value co-creation behavior (customer participation behavior, customer citizenship behavior)
Self-control theory	Brent, A S, et al. 2012	The employees of bus company	522	Surface acting	/	Job satisfaction, turnover rate, self-monitoring
Social support theory	Duke, A B, et al. 2009	Retail company	338	Emotional labor	/	Job satisfaction, job performance
Social identity theory	Qin Zhang & Weihong Zhu, 2008	College English Teacher	164	Surface acting, deep acting, true expression	/	Job satisfaction, job burnout
Affective event theory	Deborah, E R & Sharmin Spencer, 2006	College Students	123	Customer experience (fair/unfair), customer interaction is fair/unfair	Emotions: anger, happiness	Emotional labor
	Wing Lam & Ziguang Chen, 2012	Hotel staff and supervisors	424	Supervisor support, organizational fairness, negative emotions	Surface acting, deep acting	Job satisfaction, service quality, turnover rate
Cognitive dissonance theory	Ziguang Chen, et al. 2012	Hotel staff	317	Surface acting, deep acting	Job satisfaction, job burnout	work performance
Person-work fit theory	JungHoon (Jay) Lee, et al. 2016	Hotel staff	309	Customer orientation	Surface acting, deep acting	Job satisfaction
Contingency leadership theory	Jun Liu, et al. 2013	8 organizations in China	450	Transactional leadership	Team effectiveness	Team innovation
Social emotional choice theory	Francis Yue-lok Cheung & Catherine So-kum Tang, 2010	Hong Kong Organization	386	Age	Surface acting, deep acting, true expression	Job satisfaction, psychological distress
	Michael Sliter, et al. 2013	The employees of service industry	519	Age, emotional intelligence, positive emotional expression	Surface acting, deep acting	Employee happiness
	Jason, J D & Luis, A P, 2010	The employees of service industry	186	Age	Positive emotions	Surface acting, deep acting, true expression
Regulatory matching theory	Nai-Wen Chi, et al. 2016	Bank teller	397	Surface acting, deep acting	/	Emotional delivery, service destruction

Note: The table only lists representative empirical studies.
Data source: sorted according to existing literature

REFERENCES

- Barger, P B & Grandey, A A. Service with a smile and encounter satisfaction: emotional contagion and appraisal mechanisms[J]. *Academy of Management Journal*, 2006, 49(6): 1229-1238.
- Carlson, D., Ferguson, M., Hunter, E., & Whitten, D. Abusive supervision and work-family conflict: The path through emotional labor and burnout[J]. *Leadership Quarterly*, 2012, 23(5): 849-859.
- Hatfield, E, Cacioppo, J T, Rapson, R L. Primitive emotional contagion[J]. *Personality and Social Psychology Review*, 1992, 14(3):151-177.
- Hobfoll, S E. Conservation of resources: A new attempt at conceptualizing stress[J]. *Am Psychol*, 1989, 44(3): 513-524.
- Hobfoll, S. E., Halbesleben, J., Neveu, J. P., & Westman, M. Conservation of resources in the organizational context: The reality of resources and their consequences[J]. *Annual Review of Organizational Psychology and Organizational Behavior*, 2018, 5: 103-128.
- Pugh, S D. Service with a Smile: Emotional Contagion in the Service Encounter[J]. *Academy of Management Journal*, 2001, 44(5): 1018-1027.
- Wu, T Y, Hu, C. Abusive supervision and subordinate emotional labor: The moderating role of openness personality[J]. *Journal of Applied Social Psychology*, 2013, 43(5): 956-970.
- Yanran Fang, Wei Wei, Ping Luo, Xiaodong Liu, Junqi Shi & Yujie Zhan. The influence of employees' negative emotions on emotional labor strategies[J]. *Acta Psychologica Sinica*, 2019, 51(03): 353-365.
- Zhe Liu, Yong Yang, Jiafu Tang, Qin Hai Ma, Zhe Li. The multi-level mechanism of autonomous motivation and service-oriented leadership on emotional labor: an intermediary moderating model[J]. *Journal of Industrial Engineering and Engineering Man*, 2018, 32 (03): 52-62.
- Zhen Wang, Xupei Li. Transformational leadership and emotional labor strategies: the mediating role of work engagement[J]. *Management Scientists (Academic Edition)*, 2013(09): 21-30.