ARAŞTIRMA MAKALESİ / RESEARCH ARTICLE

TRENDS IN EMOTIONAL LABOR RESEARCH: BIBLIOMETRIC AND SCIENCE MAPPING ANALYSIS

DUYGUSAL EMEK ARAŞTIRMALARINDAKİ EĞİLİMLER: BİBLİYOMETRİK VE BİLİMSEL HARİTALAMA ANALİZİ

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ABSTRACT

Emotional labor is about employees in the service sector involving their emotions while performing the service job as required. Emotions are also used for commercial purposes. The study analyzes data on emotional labor through bibliometric and science mapping methods. For the analyses, data between 1982 and 2024 are scanned in the Web of Science (WoS) database, and data for 2,925 documents are accessed. After loading the data, the VOSviewer program is utilized to analyze it for bibliometric and science mapping purposes. Subsequently, the investigation unveiles the foremost authors, countries, journals, institutions, and keywords in emotional labor research. This is followed by analyzing their co-authorship, co-citation, bibliographic coupling, and keyword co-occurrence models. As a result, in emotional labor research, it is found that Alicia A. Grandey is the most productive and most cited author, the USA is the most productive country, Frontiers in Psychology is the most productive journal, and the most frequently encountered keywords are burnout, surface acting, job satisfaction, deep acting, and emotional exhaustion, respectively. The analysis findings reveal a collaborative nexus among authors, countries, and institutions, offering visual network maps and comprehensive insights into emotional labor's present status and trends within the scientific literature.

Keywords: Emotional Labor, Bibliometric Analysis, Science Mapping, Co-Authorships, Co-Citation.

JEL Classification Codes: C81, J53, M50, M54.

ÖZ

Duygusal emek, hizmet sektöründe çalışanların hizmet işini gerektirdiği gibi yerine getirirken duygularını işin içine katmalarıyla ilgilidir. Duygular ticari amaçlarla da kullanılmaktadır. Bu çalışmada, duygusal emeğe ilişkin veriler, bibliyometrik ve bilimsel haritalama metodu aracılığıyla analiz edilmiştir. Analizler için Web of Science (WoS) veri tabanında 1982-2024 yılları arasındaki veriler taranmış ve 2.925 dokümana ait veriye ulaşılmıştır. Veriler, bibliyometrik ve bilimsel haritalama analizi için VOSviewer programına yüklenmiştir. Daha sonra, duygusal emek araştırmalarındaki en üretken veya önde gelen yazarları, ülkeleri, dergileri, kurumları, anahtar kelimeleri ortaya koymak ve bunların ortak yazarlık, ortak atıf, bibliyografik eşleşme ve anahtar kelimelerin birlikte ilişki durumu modelinin analizi yapılmıştır. Sonuçta, duygusal emek araştırmalarında Alicia A. Grandey'in en üretken ve en çok atıf alan yazar, ABD'nin en üretken ülke, Frontiers in Psychology 'nin ise en üretken dergi, en sık karşılaşılan anahtar kelimelerin sırasıyla tükenmişlik, yüzeysel rol yapma, iş tatmini, derin rol yapma ve duygusal tükenme olduğu bulguları elde edilmiştir. Analiz sonuçları, yazarlar, ülkeler ve kurumlar arasında bir işbirliği ilişkisi olduğunu göstermektedir. Çalışma, bilimsel literatürdeki mevcut duygusal emek durumu ve eğilimleri hakkında görsel ağ haritaları ve tanımlayıcı bilgiler sunmaktadır.

Anahtar Kelimeler: Duygusal Emek, Bibliyometrik Analiz, Bilimsel Haritalama, Ortak Yazarlık, Ortak Atıf.

JEL Sınıflandırma Kodları: C81, J53, M50, M54.

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GENİŞLETİLMİŞ ÖZET

Amaç ve Kapsam:

İletişim ve etkileşimin yoğun olarak yaşandığı birçok hizmet sektöründe çalışanların duygusal emek davranışları giderek önem kazanmaktadır. Sosyolog Arlie Hochschild (1983), hizmet işinin duygusal yönünü kavramsallaştırmak için duyguların ticarileştirilmesini tartışarak "duygusal emek" kavramını ortaya atmıştır. Hochschild, çalışmasında havayolları gibi hizmet sektöründe faaliyet gösteren ticari işletmelerde çalışan-müşteri ilişkilerinde çalışanların davranışlarına odaklanmaktadır. Duygusal emek, hizmet sektörünün gelişmesi nedeniyle müşteri odaklı olma kaygısını ve çalışanların hizmet işini gereği gibi yerine getirirken sadece fiziksel ve zihinsel emeklerine değil aynı zamanda duygularını da dahil etmelerini ifade etmektedir. İşverenler doğrudan ya da dolaylı olarak çalışanlarından duygularını kullanmalarını talep etmektedir. Hizmet sektöründe birçok işin gerekliliğinden kaynaklı olarak ortaya çıkan, çalışan-müşteri iletişimi, iş ortamında uygun duyguların gösterilmesi için çalışanların duygularını yönetmelerini zorunlu kılmaktadır. Bibliyometri yöntemi ile yayımlanan makale ve kitapların başlıkları, yazarları, anahtar kelimeleri, alıntı yapılan referansları vb. her türlü veri istatistiksel olarak incelenmektedir. Bu sayede yazarların, ülkelerin, kurumların ve uluslararası işbirliklerinin değerlendirilmesi mümkün olmaktadır. Bu değerlendirme sonucunda gelişmekte olan eğilimler belirlenebilmekte, üzerinde yoğunlaşılan noktalar tanımlanabilmekte ve gelecek araştırmaların odak noktaları tahmin edilebilmektedir. Bilimsel haritalama yöntemi, geniş yelpazedeki bilimsel çalışmaların bir bütün olarak görselleştirilmesi, analiz edilmesi ve modellenmesi uygulanmasıdır. Yöntem ile bilimsel araştırmanın kavramsal, sosyal veya düşünsel yapılarının, araştırma alanının evriminin, gelişiminin ve dinamiklerinin görsel olarak sunulması amaçlanmaktadır. Bu çalışma ile duygusal emek kavramı konusunda geçmişten günümüze kadar yapılan çalışmaları bibliyometrik veriler üzerinden inceleyerek literatürün yapısı, gelişimi, konu ile ilgili yazarları ve çalışmaları arasındaki ilişkileri haritalamak, yorumlamak ve gelecekteki araştırmalar için araştırmacılara fikir vermek hedeflenmektedir. Nicel veriler ile nümerik ölçüm göstergeleri kullanılarak yapılan bu analizler neticesinde ulaşılan bulguların kapsayıcı bir bakış açısı ile araştırmacıların dikkatine sunularak gelecekteki araştırmalara ışık tutması amaçlanmaktadır. Duygusal emek literatürünün performans analizi ve bilimsel haritalamasını yapmak üzere, duygusal emek araştırmalarına konu yayınlara ilişkin; en üretken veya etkili yazarları, kuruluşları, ülkeleri ve dergileri belirlemek amaçlanmaktadır. Bunun yanında atıf, anahtar kelimelerin ortak ilişki, ülkelerin ortak yazarlığı, kurumların bibliyografik eşleşmesi ve kaynakların ortak atıfarı konularında duygusal emek araştırmalarının mevcut durumunu analiz etmek ve görsel ağ haritaları oluşturulması amaçlanmaktadır.

Yöntem:

Çalışmanın temelini oluşturan ikincil verilerin kaynağı Web of Science Core Collection veri tabanıdır. Veriler Web Of Science'tan (WoS) txt dosyası formatında alınmıştır. Araştırmada analiz aracı olarak VOSviewer 1.6.20 paket programı kullanılmıştır. Zaman dilimi ise 1982 yılından 2024 yılına kadar olan dönemi kapsamaktadır. Veri seti 24 Ocak 2024 tarihinde WoS veri tabanından alınmıştır. Buna göre "Tüm Alanlar" başlığı seçilerek "Duygusal Emek" ibaresini içeren yayınlar belirtilen zaman diliminde taranmış ve sonuç olarak 2925 belge (makaleler, inceleme makaleleri, editoryal materyaller, bildiriler vb.) listelenmiştir. Dokümanların yayın türü ve dili konusunda herhangi bir kısıtlama yoktur.

Bulgular:

Sonuçlara bakıldığında, özellikle 2005 yılından itibaren yayın eğilimlerinde bir artış olduğunu görülmektedir. Duygusal emek konusuyla ilgili en üretken ve en çok atıf yapılan yazar Alicia A. Grandey, en verimli ülke ABD, en etkili dergi Frontiers in Psychology ve en üretken kurum Pensilvanya Eyalet Üniversitesi (The Pennsylvania State University) olarak karşımıza çıkmıştır. Ülkelerin ortak yazarlık analizi, ABD'nin Çin, İngiltere ve Avustralya'nın yanı sıra Kanada, Güney Kore, Almaya, Singapur, gibi diğer ülkelerle de güçlü bir işbirliği gösterdiğini ortaya koymaktadır. Anahtar kelime analizi, duygusal emek araştırmalarında daha sık görülen anahtar kelimeler tükenmişlik, yüzeysel rol yapma, iş tatmini, derin rol yapma, duygusal tükenme vb. olduğunu göstermektedir. Bibliyometrik eşleştirme açısından en iyi kurum olarak Penn State Ünivesitesi öne çıkarken, ardından Akron Üniversitesi ve National Sun Yat-sen Üniversitesi gelmektedir. En çok ortak atıf yapılan kaynaklar arasında Journal of Applied Psychology, Academy Management Journal ve Journal of Organizational Behavior dergisi yer almaktadır.

Sonuç ve Tartışma:

Bu çalışmada, duygusal emek araştırmaları bibliyometrik ve bilimsel haritalama analizi yapılarak incelenmiştir. Veriler WOS veri tabanından toplanmış ve verilerin analizinde VOSviewer yazılımı kullanılmıştır. Bibliyometrik ve bilimsel haritalama analizi, yayın eğilimlerini, en üretken yazarları, kurumları, dergileri ve ülkeleri içermektedir. Bununla birlikte, ülkelerin ortak yazar, kurumların bibliyometrik eşleştirme, kaynakların ortak atıf, anahtar kelimelerin birlikte ilişkililik durumu görsel ağ haritalarında analiz edilerek sunulmuştur. Araştırma, duygusal emek üzerine yapılan yayınların kapsamlı bir resmini çizse de bazı sınırlılıklara sahiptir. Kullanılan veriler WoS veri tabanı ile sınırlı olduğundan WoS dışındaki veri kaynakları kullanıldığında bibliyometrik analiz sonuçları farklı şekilde ortaya çıkabilmektedir. Çalışmanın kritik sınırlılıkları arasında Scopus ve Pubmed gibi uluslararası veri tabanlarının, ülkelerin ulusal veri tabanlarının ve çevrimiçi olarak dağıtılmayan diğer veri kaynakların olmaması yer almaktadır. Gelecekteki araştırmalar, duygusal emeğin yorumlanmasına ilişkin daha fazla veri içeren daha kapsamlı kaynaklarla çalışarak bu çalışmayı destekleyebilir. Yukarıdaki sonuçlar, bibliyometrik ve bilimsel haritalama analizi yoluyla duygusal emek literatürü hakkında yararlı bilgiler sağlamıştır. Duygusal emek üzerine yapılan bu araştırma, bu alanda daha fazla bilgi edinmek isteyen araştırmacılara gelecekte yapacakları araştırmalar için ışık tutacaktır.

1. INTRODUCTION

Considering all the areas that make up today's economic structure, it is observed that the importance of the service sector is increasing. Developments in this field show significant changes depending on the effects of employee behavior on organizational outcomes—areas such as air transportation, tourism, health sector, fire brigade, and security sector. Emotional labor behaviors of employees are becoming increasingly important in many service sectors where communication and interaction are intense, including public spaces. Years ago, sociologist Arlie Hochschild (1983), who observed the emotional states of airline cabin crew in response to passengers' demands, introduced the concept of "emotional labor" by discussing the commercialization of emotions to conceptualize the emotional aspect of service work. In her study, Hochschild focuses on the behavior of employees in employee-customer relations in commercial enterprises operating in the service sector, such as airlines. Emotional labor refers to the concerns about being customer-oriented due to the development of the service sector and the employees' involvement not only in their physical and mental labor but also in their emotions while performing the service job as required. Employers directly or indirectly demand that their employees use their emotions.

Employee-customer communication, which arises from the requirements of many jobs in the service sector, requires employees to manage their emotions to show appropriate emotions in the work environment. Unlike displaying emotions in private life, managing emotions in the business environment affects corporate image and efficiency as it expresses the organization-customer relationship. For this reason, managing employees' emotions in the work environment takes place under the organization's control, depending on managerial decisions and regulations. Therefore, employees are not free to use their emotions in service delivery, but they do so subject to specific rules. At this point, organizations demand their employees to present their work with certain emotions during service delivery. As a result, employees re-evaluate, change, regulate and control their emotional states as required. This often results in the display of emotions that do not match the actual emotions felt. Today, emotional labor emerges as a subject of intense debate as emotional displays often do not coincide with the employee's real feelings to impress customers in return for a fee for organizational purposes. Therefore, parallel to these developments, the extent to which it has attracted attention from academic circles has become a subject that needs to be examined. The development of emotional labor in the literature, the level of interest in the concept, the topics it draws attention to, the concepts it is associated with, the analysis methods, and the intensity with which it is included in academic studies such as books, articles, and theses have revealed the need to examine numerically and statistically the intensity with which it is included in academic studies such as books, articles, and theses. This situation falls within the scope of bibliometrics, which examines the structure of the literature, its development, the relationships between the authors and their studies on the subject, etc., through the data obtained from studies conducted from the past to the present.

Alan Pritchard introduced the concept of bibliometrics in 1969 to avoid conceptual confusion. He defines bibliometrics as shedding light on the nature and development of a discipline, its processes, and the future through the counting and analysis of written communication from various aspects (Pritchard, 1969, p. 349). He revealed that with this method, the titles, authors, cited references, and keywords of published documents such as articles and books can be determined. All kinds of data are examined statistically. This way, evaluating authors, countries, institutions, and international collaborations is possible. As a result of this evaluation, developing trends can be identified, points of focus can be defined, and focal points of future research can be predicted. One of the research approaches in this field is the bibliometric mapping method, also known as science mapping. This method is an application for visualizing, analyzing, and modeling scientific studies in various fields. It analyzes the conceptual, social, and intellectual structure of scientific research and visualizes the evolution, development, and dynamics of the research field (Gupta and Chakravarty, 2021).

Several package programs are used to analyze bibliometric data, visually presenting the social or intellectual structures of scientific research and the research field's evolution, development, and dynamics. In this study, the VOSviewer program developed by Van Eck and Waltman (2009) was used to analyze bibliometric data. VOSviewer is an open-source, free software program. This bibliometric mapping program allows the creation of maps based on network, bibliographic and text data of studies in the literature, visualizing these maps and exploring various topics. Network mapping is readily used to analyze bibliometric data as a critical procedure for visualizing connections within a body of work. Every network contains two types of information: nodes and edges. Nodes include publications, journals, authors and keywords; Edges represent the relationships between pairs of nodes and the strength of these relationships (Van Eck & Waltman, 2014).

This study aims to examine the studies on the concept of emotional labor from past to present through bibliometric data to map and interpret the structure of the literature, its development, the relationships between the authors and their works on the subject, and to give ideas to researchers for future research. It aims to shed light on future research by presenting the findings obtained from these analyses using quantitative data and numerical measurement indicators to the attention of researchers with a comprehensive perspective.

2. CONCEPTUAL FRAMEWORK

2.1. Emotional Labor

Although emotional labor dates back to Aristotle, the concept is mentioned in sociologist Arlie Hochschild's book "The Managed Heart: Commercialization of Human Feeling", first published in 1983 (Micciche, 2020). Emotional labor is "the management of emotions to create a clearly observable facial and physical appearance that is sold for a fee and therefore has an exchange value" (Hochschild, 1983, p. 7). Her book defines two types of emotional labor: deep acting and surface acting. She states that the general framework of emotional labor requires the coordination of mind and emotion (Hochschild, 1983, p. 7). According to Steinberg and Figart (1999), emotional labor is also a relational aspect of the job rather than a task-based aspect. The examples given by Hochschild reveal the scope of emotional labor descriptively. Examples such as the hospital coordinator rallying the staff to achieve a common goal set by management, the judge has to remain impartial while examining evidence of a monstrous murder, and corporate employees having to manage their clients' concerns are some of Hochschild's good examples of identifying the scope of emotional labor (Hochschild, 1983).

Since Hochschild introduced the concept of emotional labor, many scientists and researchers from many fields have produced new definitions to help us better understand emotional labor. For example, the external display is taken one step further and defined as the employee's capacity to manage personal emotions, sense the emotions of others, and respond appropriately depending on the job (Mastracci et al., 2010, p. 125). In another definition, emotional labor is expressed as exhibiting the emotions the employee feels to the target audience with whom he/she communicates and transforming them into observable behaviors (Ashforth & Humphrey, 1993, p. 89). Emotion regulation performance is also expressed as responding to work-based emotional needs to produce emotions towards another person and arouse emotions in that person to achieve organizational goals (Grandey et al., 2013, p. 18).

Emotional labor is a work-oriented requirement, meaning the employee can perform the job effectively. This concept includes managing the employee's emotional state to perform the job successfully, and the emotional state of the customer deals with. Employees instantly perform the following steps in the management process of this emotional state (Hsieh et al., 2019, p. 241).

- Feeling the emotional state of the person or customer he/she is dealing with,
- The employee analyzes his/her emotional state,
- Determining whether the emotional state of the person or customer dealing with needs to change (For example, calming down the customer who exhibits an aggressive attitude),
- Deciding whether the employee will suppress his/her emotional state towards the person or customer he/she is dealing with (For example, the employee should suppress his/her fear in order to calm down the customer who exhibits an aggressive attitude),
- Determining the emotional display that will get the desired reaction from the person or customer.

2.2. Emotional Labor Approaches

In the literature, many emotional labor approaches have been put forward on the emotions employees feel and the emotions expected from them by their organizations. The leading ones of these approaches are briefly summarized below.

2.2.1. Hochschild (1983) Approach

Hochschild used the concept of emotional labor to express the management of emotions to achieve observable facial and physical appearance. In her study, she observed the behaviour of flight attendants working in airline companies while working. As a result of the study, the interior design of the aircraft, the music played, and the

food services provided. He concluded that the smiling behavior of cabin crew, like the services, also affects the passengers (Hochschild, 1983, p. 11). According to him, emotional labor is sold for wages and therefore has an exchange value (Hochschild, 1983, p. 7). According to this definition, emotional labor is the management of emotions by using facial and body movements to exhibit the desired behaviors within the framework of the rules set in a workplace for a fee.

She scrutinized the emotional labor process through two distinct lenses: surface acting and deep acting, which are recognized as fundamental strategies across the board. (Chou et al., 2012). Surface acting behavior involves the employee expressing the emotions desired by the organization, unlike the emotions he feels, and displaying them in the display). Employees who exhibit this behavior play a role by wearing a mask to camouflage their real emotions (Zhang & Zhu, 2008; Yang & Guy, 2015). Deep role-playing means that the employee really feels and internalizes it, and it is possible to express deep acting behavior as a process in which the emotions and thoughts in the individual's inner world are controlled in order to comply with the determined rules of behavior (Brotheridge & Grandey, 2002, p. 22). While there is an obligation in the first case, in the second case, it is a matter of displaying behavior that comes from within the employee. For this reason, deep-acting behavior significantly impacts the other party (Hochschild, 1983).

2.2.2. Ashforth and Humphrey (1993) Approach

Ashforth and Humprey (1993) put forward an approach by associating emotional labor with observable behaviors rather than managing emotions in Hochschild's approach (Grandey, 2000, p. 96). Emotional labor is the employee's effort to direct behavior that affects the perception during the interaction and communication process with the customer (Ashforth & Humphrey, 1993, p. 90). As per their viewpoint, employees serving as the organization's ambassadors project its outward image, underscoring the significance of emotional labor within the service industry. In addition, they added the dimension of "sincere emotions" expressed as natural behavior to the surface and deep acting dimensions that Hochschild put forward regarding emotional labor (Asforth & Humphrey, 1993, p. 94). In this dimension, it is stated that the behavior exhibited, and the underlying emotions may arise from the emotions the employee feels without making any effort. Ashforth and Humprey (1993) focused on the part of the emotional labor process that affects the customer rather than the emotions that arise in the employee. For this reason, how the employee conveys their feelings to the other party during the emotional labor process affects the quality of the service (Ashforth & Humprey, 1993).

2.2.3. Morris and Feldman (1996) Approach

Emotional labor is the planning, control, and effort required to display the emotions desired by the organization in interpersonal affairs (Morris & Feldman, 1996, p. 987). They conceptualized emotional labor in a four-dimensional structure. These are the emotional dissonance that occurs due to the frequency of appropriate emotional displays, the attention given to the desired display rules, the diversity of emotions shown, and the employee not feeling the emotions expected to be displayed by the organization. Due to this four-dimensional structure, emotional labor has been examined in a more complex structure, generally as the employee's display of emotions expected by the organization during service delivery (Morris & Feldman, 1996, p. 987). According to this situation, four different assumptions have been put forward.

- Social environment shapes emotions,
- Even in cases where there is harmony between the emotions desired to be displayed by the organization and the emotions of the employee, a small amount of effort is needed,
- The display of personal emotions is similar to a marketed product with commercial value. In this case, the focus is not on emotional management but on exhibiting the behavior expected by the organization (Morris & Feldman, 1996, p. 988).
- There are rules regarding how and when emotions are displayed. Defined as display rules and how to express which emotions in which situations. They are defined as display rules and specify which emotions should be displayed and how in which situations (Morris & Feldman, 1996 p. 988).

2.2.4. Grandey (2000) Approach

Grandey (2000) examined and analyzed previous studies on emotional labor and presented a different approach. The model he puts forward offers a guiding theoretical framework to examine emotional labor from previous

perspectives, to make an integrative definition of emotional labor, and to understand emotional labor mechanisms that include individual differences such as emotional intelligence in emotion regulation and organizational factors such as control support (Grandey, 2000, p. 95). For this purpose, she brought a new perspective and included the "emotion regulation" approach to emotional labor (Grandey, 2000: 98). It is stated that employees can adjust the way they express their emotions within the framework of organizational rules determined by the emotion regulation approach (Grandey, 2000: 95). Accordingly, it is stated that it is a process that determines when, where and how employees should express their emotions (Gross, 1998, p. 275). According to Grandey, surface acting represents the control of behavior, while deep acting represents the control of feelings (Grandey, 2000).

It is suggested that there are four main factors that affect employees' emotional labor in the service sector: the content and style of communication, whether it is temporary or permanent, the employee's autonomy in the interaction process, and the complexity level of the interaction. (Grandey & Diamond, 2010). The distinctive feature of the model developed by Grandey, who defines emotional labor as the regulation of emotions and behaviors in line with organizational goals, is that it is a combination of previous approaches, and the concept of emotion regulation is included in the model. Emotion regulation is the ability of an employee to control their emotions in an interaction with a customer and to respond appropriately by maintaining emotional balance.

3. RESEARCH

The research employs bibliometric and science mapping analyses to explore emotional labor. It delves into the connections among scientific publications, research institutions, journals, countries, researchers, and keywords. Additionally, it aims to uncover emerging trends in emotional labor research, identify leading contributors in terms of keywords, countries, authors, and journals, and offer insights for future studies through co-authorship, co-occurrence, bibliographic coupling, and co-citation analysis. The study addresses critical research questions concerning the performance analysis and scientific mapping of emotional labor literature or research publications to achieve these goals.

- To pinpoint the most prolific or impactful authors, institutions, countries, and journals in emotional labor research,
- To scrutinize and illustrate the present state of emotional labor research through citation analysis, keyword co-occurrence, country co-authorship, institutional bibliographic coupling, and source co-citation patterns.

4. METHOD

The study aims to analyze and visually present the conceptual, social, or intellectual structures of "emotional labor" research and the research field's evolution, development, and dynamics. For this purpose, the bibliometric analysis method was chosen, which analyzes the relevant literature publications using metric data to understand the research fields, authors, institutions, and relationships between studies related to emotional labor.

There are many databases where data can be collected. Among these, the WoS database is a leading analytical information platform that includes many high-quality, peer-reviewed journals with international reach, conference proceedings, and many disciplines. This database, the world's most comprehensive source of academic information, allows searching multiple databases simultaneously from a single interface through the Web of Science Core Collection. In addition, the most crucial advantage of the WoS database is that it has transparent, accessible, organized, and consistent information (Zhao & Strotmann, 2015). This study analyses and visualizes the literature on emotional labor research. The study's basis relies on secondary data sourced from the Web of Science Core Collection database, obtained in text format. Analysis was conducted using the VOSviewer 1.6.20 package program. The study covers the data period from 1982 to 2024.

The data set was obtained from the WoS database on January 24, 2024. Accordingly, by selecting the title "All Fields", publications containing the phrase "Emotional Labor" were scanned at all times, and as a result, 2925 documents (articles, review articles, editorial materials, proceedings, etc.) were listed. There are no restrictions regarding the publication type and language of the documents.

Due to the export limit of 500 records at a time in the WoS database, the data is partitioned into six segments (1-500, 501-1000, 1001-1500, 1501-2000, 2001-2500, 2501-2925) in the "Tab Delimited File" format. Record and Cited References" was selected and transferred to a folder. Then, visual maps were created with all the exported

records in the VOSviewer package program. The analysis of visual maps yielded insights into author productivity, prominent journals, citation patterns, collaborative trends among authors, institutions, and countries, and emerging themes in emotional labor research.

Concepts such as clusters, elements, connections, number of connections, networks, connection strength and total connection strength are used in the study. The meanings of these concepts can be briefly summarized as follows. Items encompass publications, researchers, or terms. Connection denotes the link or association between two elements. Every link possesses a strength indicated by a positive numerical value, with a higher value indicating a stronger connection. A network refers to a collection of elements interconnected by various connections. A cluster comprises a group of elements depicted on a map, often identified by cluster numbers such as 1 and 2. In the visualization of a map, items with greater weights are displayed more prominently compared to those with lesser weights. Two standard weight features include the connection and total connection power features. The number of connections denotes how many links an element has with other elements. The combined strength of each element determines the Total Link Power (TLP) 's connection with others, reflecting the overall connection potency.

Limitations of the research: The use of all data from the Web of Science database constitutes the limitation of the study.

5. FINDINGS

5.1. Analysis of Publication Outputs and Growth Trends

Figure 1. shows that emotional labor, as a research topic, has attracted the attention of researchers with 25 documents since 2005; this number increased to 100 in 2013, 150 in 2017, 323 in 2019, and peaked with 351 documents in 2021. Interest has been at its highest level in the last five years. It is anticipated that the number of records, which is 4 as of January 2024, will continue to increase with the work to be done throughout the year. In general, it is observed that publications on emotional labor literature increase every year.

Figure 1. Trends in the Number of Documents Published in Emotional Labor Studies
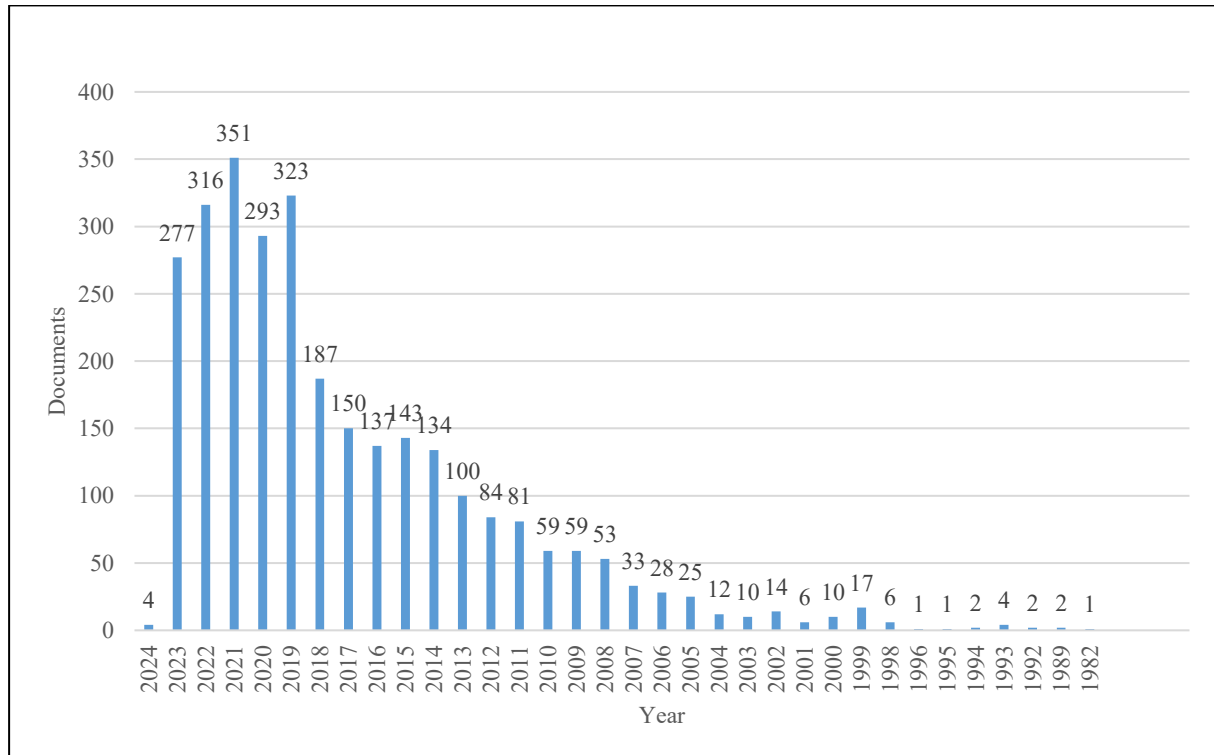
5.2. Most Productive and Highly Cited Author

It is stated that an author must write more than 10 articles on any subject to be considered a productive writer (Crane, 1969). In the analysis performed in the VOSviever program, "citation" was selected as the analysis type and "authors" as the analysis unit, the minimum number of documents for an author was selected as 1, and the minimum number of citations was selected as 1. This selection reflected the general situation on the network maps with maximum data. In this context, it was observed that 5203 of the 6367 authors who conducted the study met this threshold.

Figure 2. Visualizing Networks: Leading Authors in High-Impact Emotional Labor Research
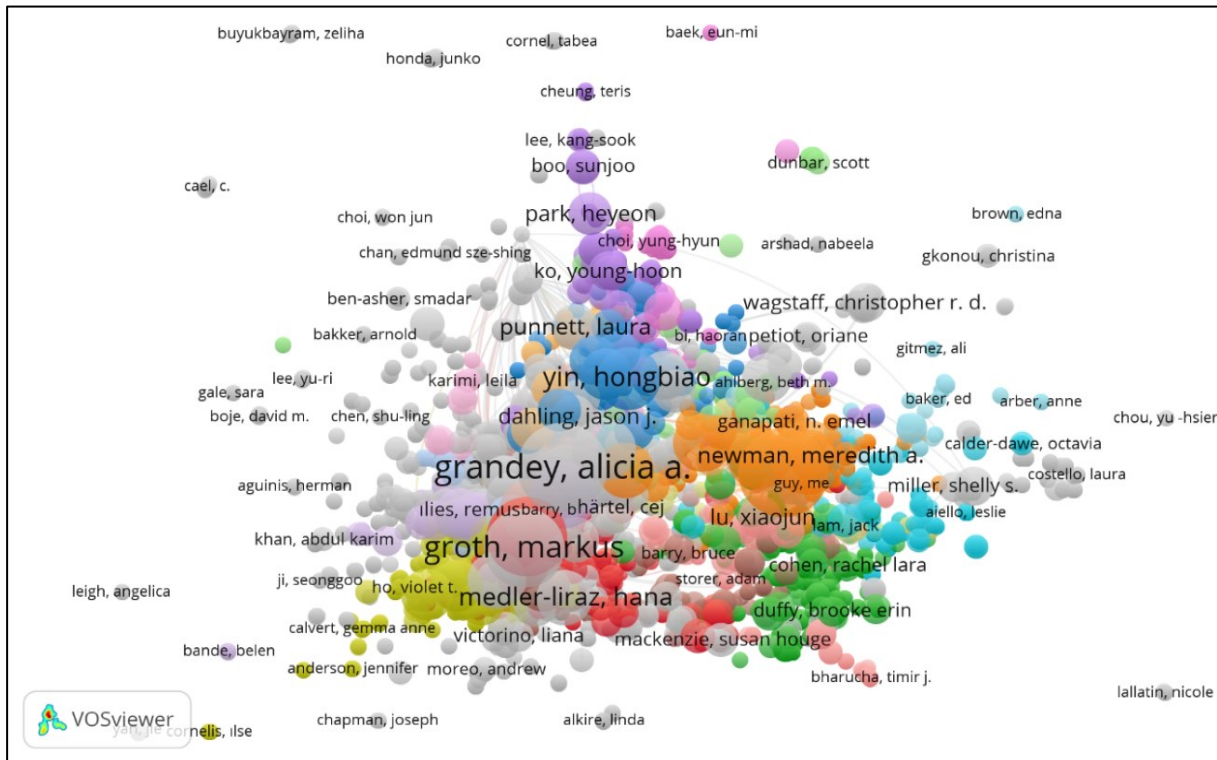
*Item(Frame)=Author, *Weight=Significance of the author based on productivity metrics (number of documents/citations)

Table 1. Leading Authors to Emotional Labor Research

SN	Authors	Documents	Citations	TLS
1	grandey, alicia a.	29	4462	6965
2	guy mary e.	26	586	881
3	groth, markus	21	2263	2967
4	hur, won-moo	21	650	1261
5	mastracci, sharon h.	18	323	418
6	diefendorff, james m.	17	2822	4784
7	gabriel, allison s.	15	1092	2011
8	yin, hongbiao	13	394	495
9	hsieh, chih-wei	12	298	533
10	humprey, ronald h.	11	925	888

Table 2. The Highly Cited Authors in Emotional Labor Research

SN	Authors	Documents	Citation	TLS
1	grandey, alicia a.	29	4462	6965
2	diefendorff, james m.	17	2822	4784
3	groth, markus	21	2263	2967
4	Rupp, deborah e,	9	1621	1007
5	hulseger, ute r.	6	1614	366
6	law, ks	2	1564	253
7	wong, cs	2	1564	253
8	ashforth, be	2	1510	1625
9	humprey, rh	2	1510	1625
10	hennig-thurau, thorsten	7	1370	1616

Note: In the data set, the "grandey, aa" data written differently in the author's list were added to "grandey, alicia a." and the "diefendorff, jm" data were added to "diefendorf, james m." since the authors are the same people and included in Table 1. and Table 2. reflected.

When the data was analyzed using **Table 1.** and **Figure 2.** from the VOSviewer package program, according to the order of the number of documents, Alicia A. Grandey was the most productive author on the emotional labor literature with the number of 29 documents, 4462 citations and 6965 TLS. Mary E. Guy is followed by 26 documents, 586 citations and 881 TLS. Marcus Groth ranked third with 21 documents, 2263 citations, 2967 TLS, Won Moo Hur ranked fourth with 21 documents, 650 citations, 1261 TLS, and Sharon H. Mastracci ranked fifth with 18 documents, 323 citations, 418 TLS. As a result, out of the 6.367 authors who published emotional labor literature, Alicia A. Grandey appears the most productive.

When the data is analyzed using **Table 2.** and **Figure 2.** from the VOSviewer package program, Alicia A. Grandey appears as the most cited author with 29 documents, 4462 citations and 6965 TLS according to the number of citations. James M. Diefendorff follows him with 17 documents, 2822 citations, and 4784 TLS. Markus Groth is in third place with 21 documents, 2263 citations and 2967 TLS, Deborah E. Rupp is in fourth place with 9 documents, 1621 citations, 1007 TLS, and Ute R. Hülseger is in fifth place with 6 documents, 1614 citations, 366 TLS. As a result of the analysis of bibliographic data with VOSviewer software, it is revealed that Alicia A. Grandey is the most productive and highly cited author in emotional labor research.

5.3. Analysis of Leading Countries

In the analysis made in the VOSviewer program, the minimum number of documents for a country was selected as 1 by selecting "citation" as the analysis type and "countries" as the analysis unit; the minimum number of citations was chosen as 1. In this context, it was observed that 85 of the authors from 92 countries who conducted the study met this threshold. This selection reflected the general situation on the network maps with maximum data.

Figure 3. Visualizing Networks: Emotional Labor Research in the Most Productive Countries
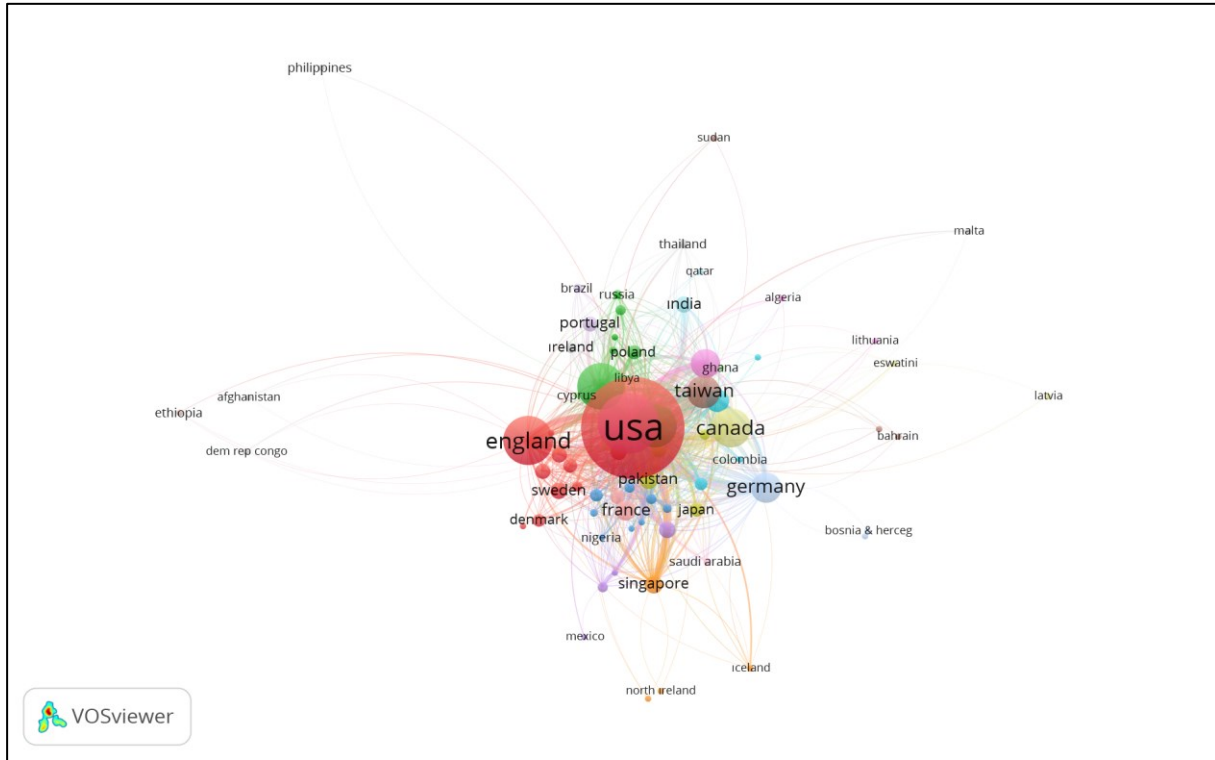
*Item (circles) = Country, *Weight = Significance of a country based on productivity levels (number of documents)

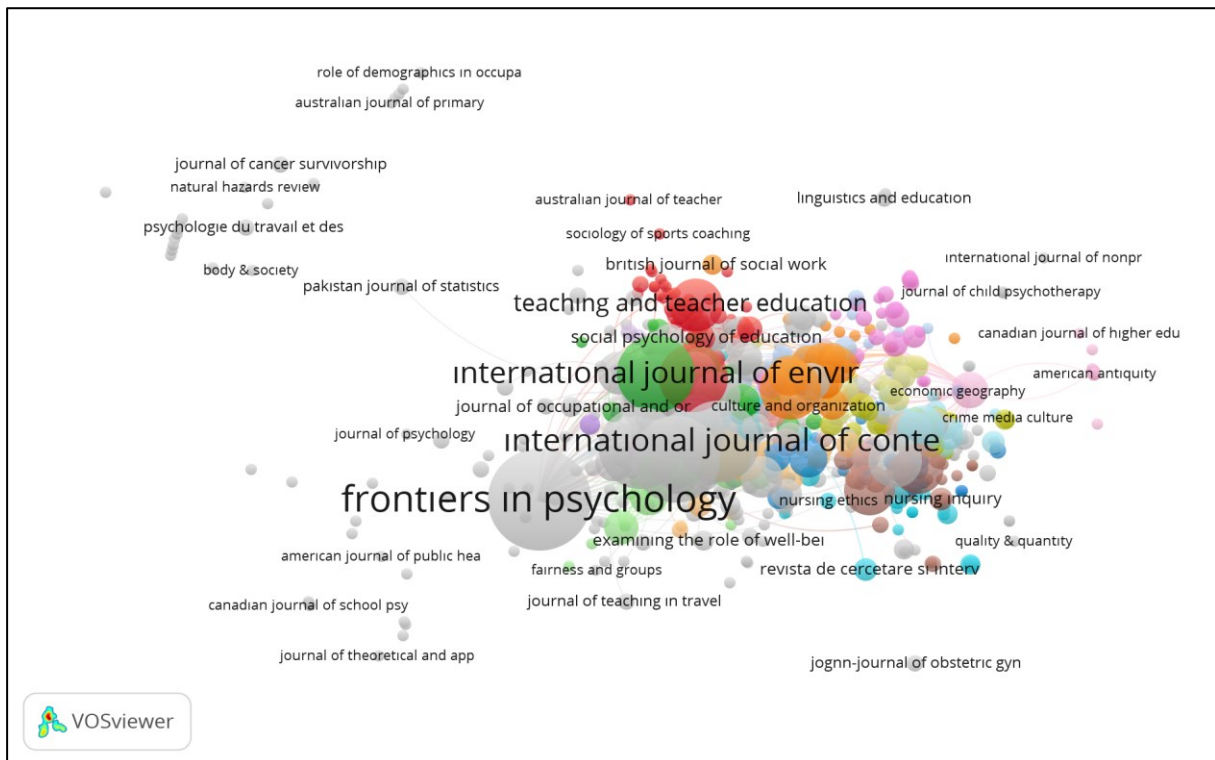**Table 3.** Leading Nations in Emotional Labor Research

SN	Authors	Documents	Citations	TLS
1	USA	1110	48694	14360
2	Peoples R China	401	8536	5533
3	England	262	6822	1802
4	South Korea	238	3776	3267
5	Australia	201	6730	3299
6	Canada	167	5639	2787
7	Taiwan	120	2202	1962
8	Germany	104	5163	2201
9	Türkiye	95	1001	1114
10	Israel	58	1420	932

The leader or most productive country in emotional labor is the United States of America (USA). After examining **Table 3.** and **Figure 3.**, it is seen that the USA is the most productive country in the emotional labor literature with 1110 documents, 48694 citations, and 14360 TLS, and China follows it with 401 documents, 8536 citations, and 5533 TLS. While England secure the third with 262 documents, 6822 citations, and 1822 TLS, South Korea ranks fourth with 238 documents, 3776 citations, and 3267 TLS, and Australia ranks fifth with 201 documents, 6730 citations, and 3299 TLS. Türkiye ranks ninth in emotional labor research with 95 documents, 1001 citations and 1114 TLS, and it is seen that there is an increasing interest every day.

5.4. Analysis of Leading Sources

In the analysis performed in the VOSviever program, "citation" was selected as the analysis type, "source" was selected as the analysis unit, the minimum number of documents for a source was selected as 1, and the minimum number of citations was chosen as 1. In this context, it was observed that 973 of the 1248 sources who conducted the study met this threshold.

Figure 4. Visualizing Networks: Top Journals in Emotional Labor Research

*Item (circle) = Sources, *Weight = Determined by the quantity of published documents.

Table 4. Leading Journals in Emotional Labor Research Publications

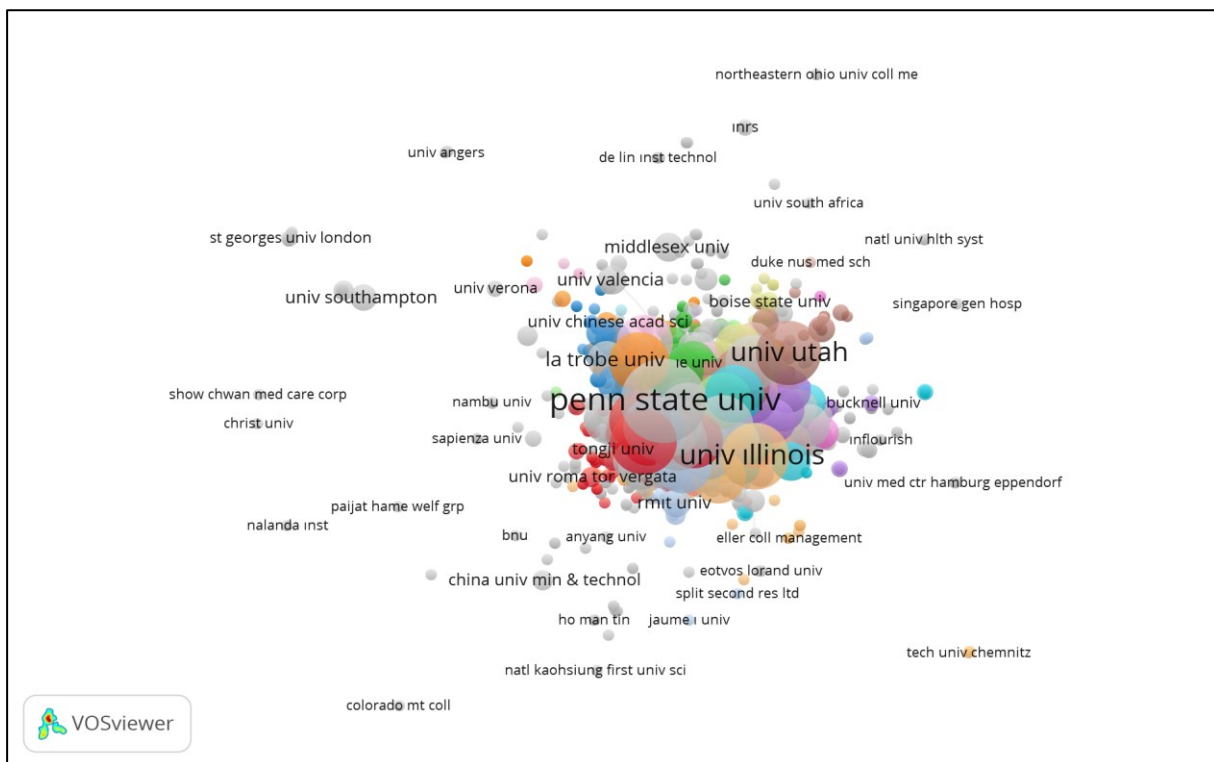| SN	Journals	Documents	Citations	TLS
1	Frontiers in Psychology	77	724	758
2	International Journal of Hospitality Management	56	3130	1077
3	International Journal Contemporary Hospitality Management	50	1546	548
4	Journal of Applied Psychology	49	6872	1681
5	International Journal of Environmental Research and Public Health	44	599	280
6	Sustainability	34	241	316
7	Journal OF Occupational Health Psychology	32	3401	1262
8	Palgrave Handbook OF Global Perspectives ON Emotional Labor IN Public Service	27	30	135
9	Journal of Organizational Behavior	26	2416	1041
10	Work and Occupations	21	1435	404

Frontiers in Psychology journal appears as the most active journal that publishes the most on emotional labor literature. **Table 4.** and **Figure 4**. highlight the journal activity, showcasing Frontiers in Psychology as the most dynamic, with 77 documents, 724 citations, and 758 TLS. The International Journal of Hospitality Management closely follows, with 56 documents, 3130 citations, and 1077 TLS. The International Journal Contemporary

Hospitality Management is ranked third, with 50 documents, 1546 citations, and 548 TLS. Subsequently, the Journal of Applied Psychology follows with 49 documents, 6872 citations, and 1681 TLS. The International Journal of Environmental Research Public Health trails with 44 documents, 599 citations, and 280 TLS.

5.5. Analysis of Leading Organizations

In the analysis performed in the VOSviewer program, "citation" was selected as the analysis type, "organization" was selected as the analysis unit, the minimum number of documents of an institution was selected as 1, and the minimum number of citations was selected as 1. In this context, it was observed that 1901 out of 2308 institutions working on this threshold met.

Figure 5. Visualizing Leading Institutions in Emotional Labor Research Networks

*Item (frames) = Institutions/Organizations, *Weight = Regarding document output

**Table 5.** Leading Organization in Emotional Labor Research Output

SN	Organization	Documents	Citations	TLS
1	penn state univ	51	5674	5782
2	univ illinois	32	3254	1559
3	hong kong polytech univ	31	1676	888
4	univ utah	30	265	396
5	purdue univ	27	1172	1037
6	hanyang univ	26	180	714
7	kyung hee univ	26	687	654
8	yonsei univ	25	434	575
9	Univ akron	24	1842	2317
10	Virginia commonwealth univ	24	2001	2089

According to **Table 5.** and **Figure 5.**, Pennsylvania State University is the leading institution with 51 documents, 5674 citations, and 5782 TLS. It is followed by the University of Illinois at Urbana-Champaign, with 32 documents, 3254 citations, and 1559 TLS. Hong Kong Polytechnic University ranks third with 31 documents, 1676 citations, and 888 TLS, while the University of Utah ranks fourth with 30 documents, 265 citations, 396 TLS, and Purdue University ranks fifth with 27 documents, 1172 citations, and 1037 TLS.

5.6. Examining Country Co-authorship Patterns

The relationship between two authors can be gauged by the quantity of jointly authored documents, offering insight into scientific collaboration among authors, organizations, and countries (Van Eck & Waltman, 2014). Analyzing co-authorship by countries elucidates the level of communication and collaboration among the leading or most productive nations in emotional labor literature. Figure 6 depicts the co-authorship analysis among countries. When at least 1 publication and 1 citation criteria were selected to determine the most connected and collaborative countries for creating a visual network map, 85 out of 92 countries met the criteria.

**Figure 6.** Visualizing Country Collaboration in Emotional Labor Research (The Overlay Visualization Map)
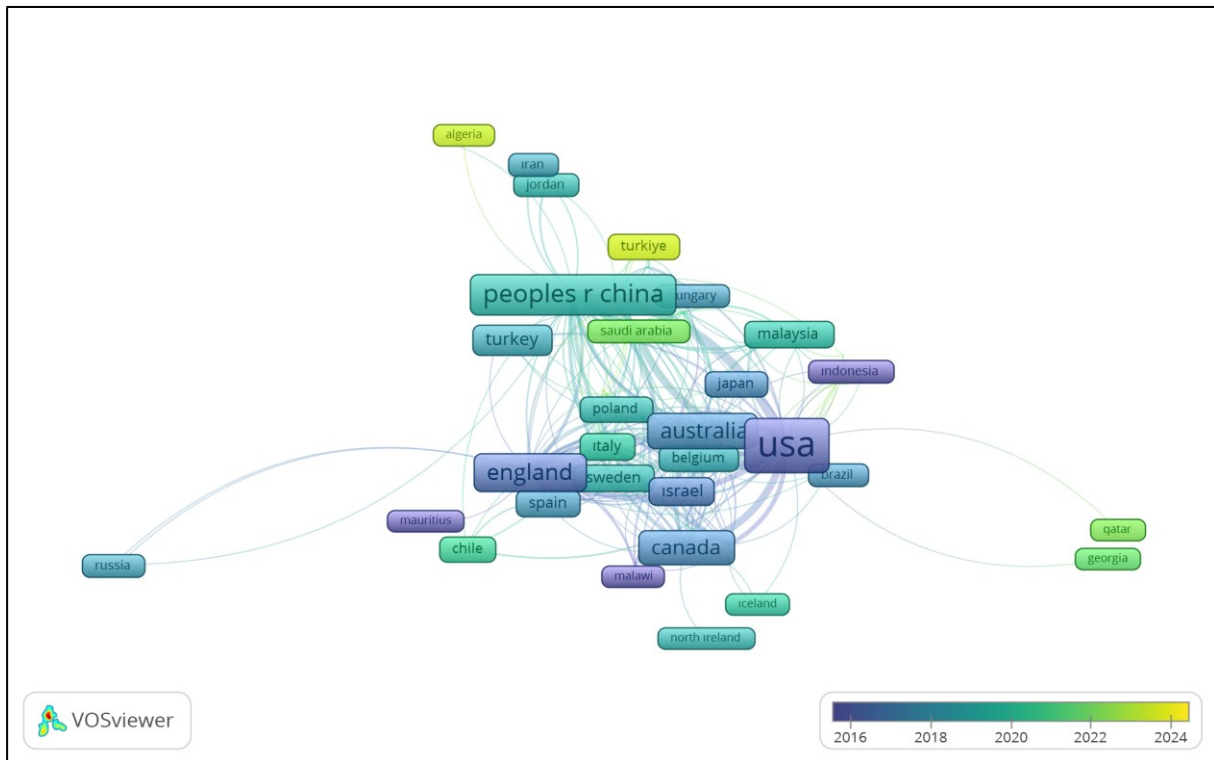
*Items (Frameworks)= countries, *Weight= Regarding the connection or relationship between countries

According to **Figure 6.**, the analysis revealed that the USA focuses most on connection and cooperation in cross-country emotional labor research. It is seen that the USA, which works with other countries the most on connection and cooperation, has 335 TLS. The USA has strong ties with China, the UK and Australia. The connection strength between the USA and China is 70, and the connection strength between the USA and the UK and Australia is 27. Additionally, the United States maintains significant relationships with Canada, South Korea, Germany, Singapore, Netherlands, Taiwan, and various other nations. The Overlay Visualization illustrates countries' contributions to emotional labor research based on the year of publication. Accordingly, it is seen that Saudi Arabia, Türkiye, Algeria, Georgia, and Qatar have contributed to the emotional labor literature with their publications in recent years. The results reveal that relevant scientific research, including emotional labor, is not subject to geographical limitations; on the contrary, more collaboration brings more success.

5.7. Institutional Bibliographic Coupling

Within the bibliographic coupling method, two documents referencing a shared work establish a connection; this relationship is termed bibliographic coupling (Kessler, 1963). **In Figure 7.**, the bibliographic coupling of institutions is shown with a overlay visualization map. In the analysis, "Bibliographic coupling" was selected as the analysis type, "organizations" was selected as the analysis unit, and institutions with at least 10 documents and at least 10 citations were included in the analysis. By computing the TLS values for bibliographic coupling links, along with document and citation counts, across all 84 out of 2308 organizations meeting these criteria, the top 10 organizations with the highest TLS were identified.

Figure 7. Visualizing Institutional Bibliographic Coupling in Emotional Labor Research (The Overlay Visualization Map)
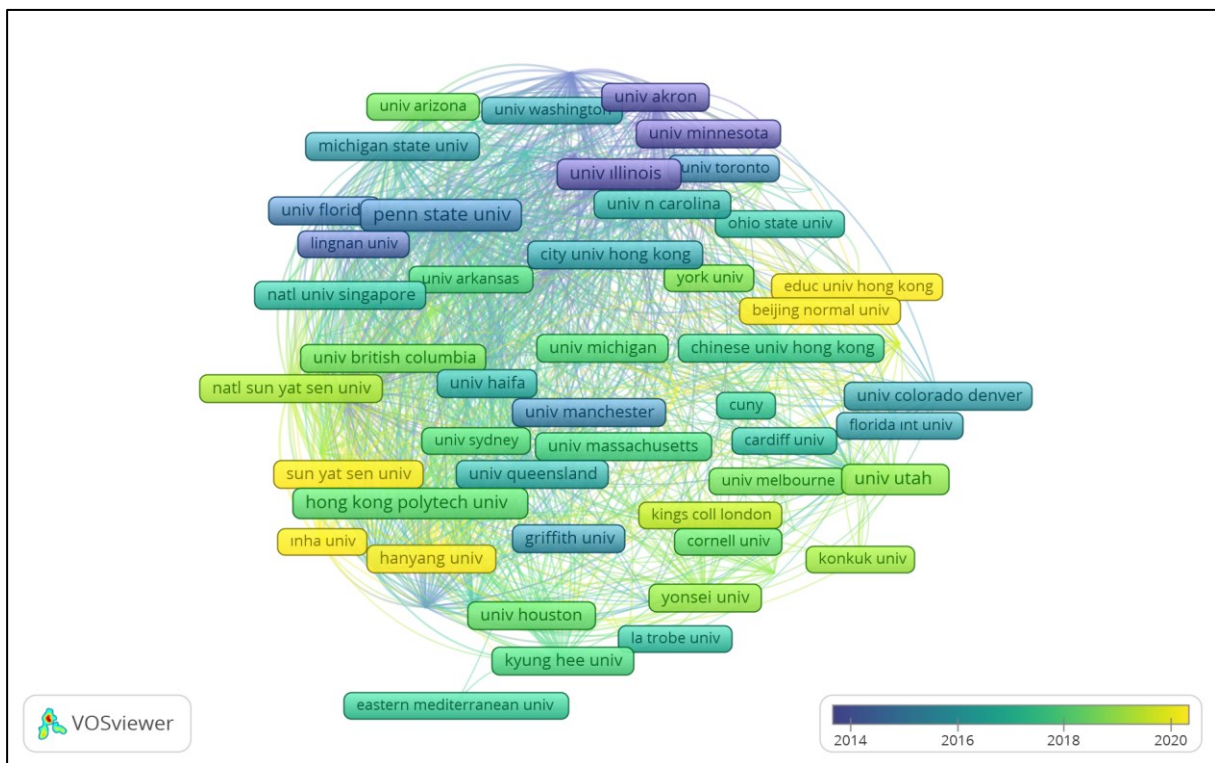
*Items (frameworks) = Organizations, *Weight= Regarding the interconnectedness or association of organizations

As shown in **Figure 7.**, the analysis reveals that Penn State University is the top-ranking influential organization, with 51 documents, 5674 citations, and 171307 TLS. Following closely, the University of Akron secures the second position with 24 documents, 1842 citations, and 89900 TLS. National Sun Yat-sen University follows closely in third place with 21 documents, 599 citations, and 76142 TLS. Virginia Commonwealth University is in fourth place with 24 documents, 2001 citations, and 72344 TLS. Hanyan University ranks fifth with 26 documents, 180 citations, and 71598 TLS.

According to the overlay visualization map, the yellow-framed National Sun Yat-sen University, Inha University, Hanyang University, Hong Kong University of Education, and Beijing Normal University represent institutions recently published on emotional labor studies.

5.8. Examining Co-citations among Cited Sources

Co-citation refers to the frequency with which other sources cite two documents together. When two documents are cited jointly in at least one other document, they are considered co-cited. The greater the co-citation frequency between two documents, the stronger their co-citation strength, indicating a higher level of semantic relatedness (Van Eck & Waltman, 2014). **Figure 8.** illustrates the co-citation analysis of sources referenced in emotional labor

studies. The map includes sources with at least 100 citations and 200 TLS among sources. 205 of 42,607 sources meet these criteria.

Figure 8. Visualizing Co-citation Patterns Among Sources in Emotional Labor Research.
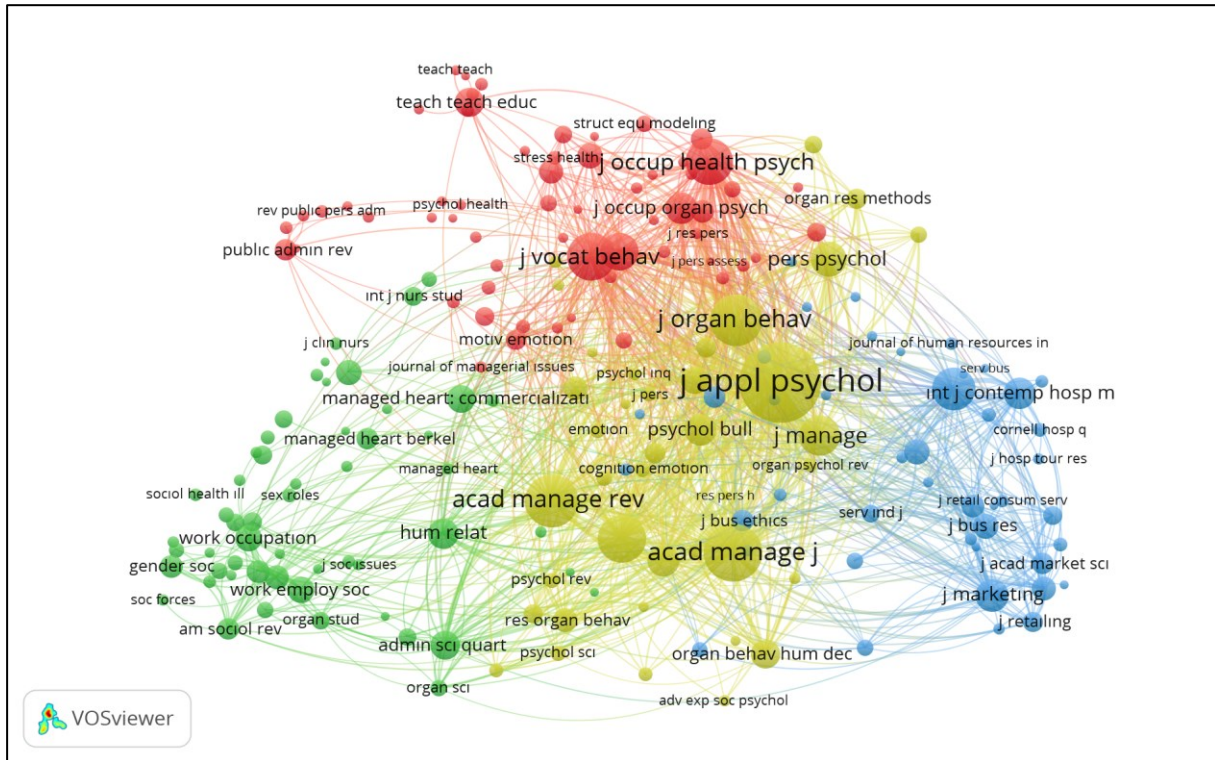
*Items (circles) = Sources cited *Weight= Regarding the interconnectedness and association among cited sources

The network visualization map highlights distinct concentrations of resources represented by various colors, including yellow, red, green, and blue.

Notably, sources in the yellow cluster exhibit significantly higher citation rates than those in other clusters. For instance, within the yellow cluster, The Journal of Applied Psychology leads with 7505 citations and 439100 TLS, followed by the Academy of Management Journal with 3926 citations and 247132 TLS, and the Journal of Organizational Behavior with 3043 citations and 191413 TLS.

Meanwhile, in the red cluster, notable sources include the Journal of Vocational Behavior, with 2593 citations and 142612 TLS, and the Journal of Occupational Health Psychology, with 2564 citations and 151832 TLS.

Within the blue cluster, prominent sources include the International Journal of Hospitality Management, with 2072 citations and 105554 TLS, alongside the Journal of Marketing, with 1249 citations and 73643 TLS.

Finally, the green cluster includes journals such as Human Relations, with 1091 citations, 63181 TLS, and Administrative Science Quarterly, with 1018 citations and 69620 TLS.

5.9. Analysis of Keyword Co-Occurrences

Similar to how a keyword represents the main content of an article, the frequency of occurrence and co-occurrence can also indicate, to some degree, the themes prevalent in a specific area (Zong, 2013). **Figure 9.** illustrates the network visualization map depicting keyword co-occurrence in emotional labor research. Selecting a minimum keyword repetition threshold of 10 reveals that 125 of 5656 keywords meet this criterion.

Figure 9. Visualizing the Network of Keyword Co-Occurrences in Emotional Labor Research
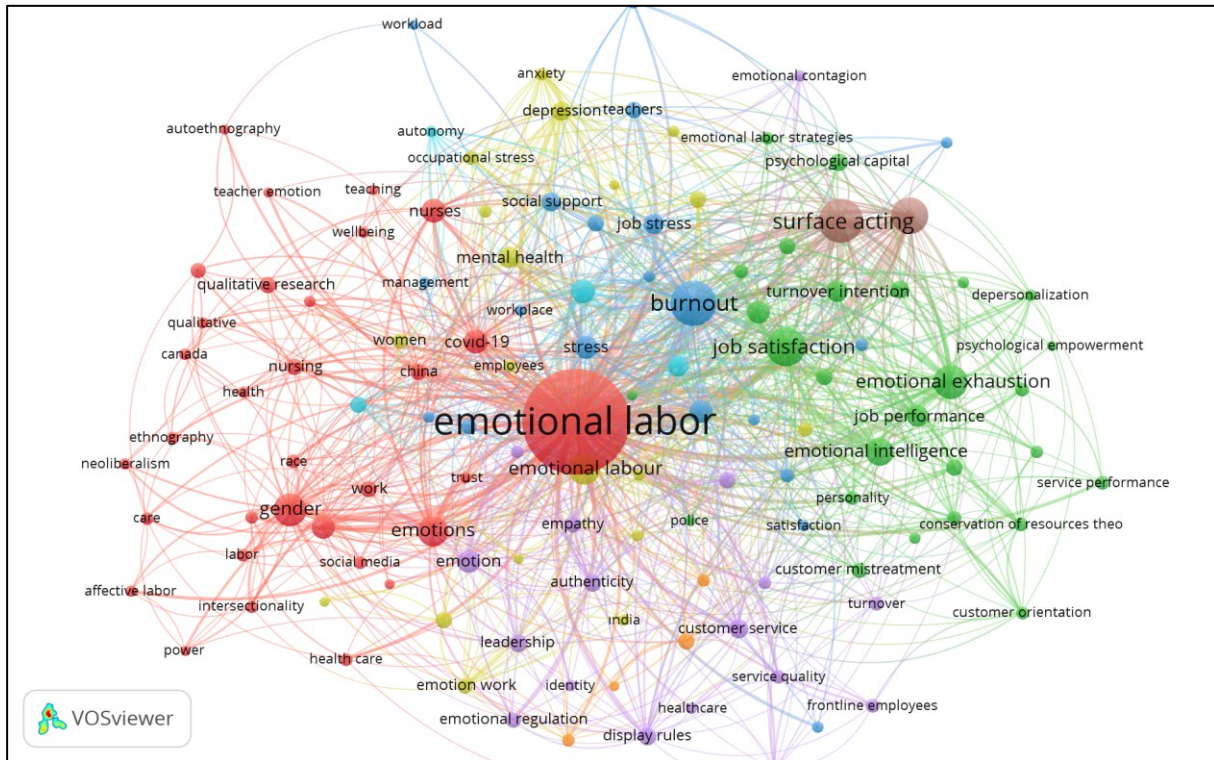
*Items (circles) = Keywords, *Weight= Regarding the frequency of keyword co-occurrence

As a result of the analysis, eight clusters of different colors were identified, shown in **Figure 9**., each cluster containing groups of the following keywords:

- Red Cluster (32 keywords): This cluster's most frequently used keywords are emotions and gender. Other keywords include nurses, intersectionality, health care, power, care, and race.

- Green Cluster (27 keywords): The prominent words in this cluster are job satisfaction, emotional exhaustion, and emotional intelligence. Other keywords in the cluster are job performance, intention to leave, psychological empowerment, psychological capital, and service performance.

- Blue Cluster (20 keywords): The term "Burnout" stands out prominently within this cluster. In the cluster, stress, work stress, teachers, social support, and awareness are some of the other main keywords.

- Yellow Cluster (19 keywords): The standout term within this cluster is "mental health." Other keywords prominently used in this cluster are depression, occupational stress, occupational health, nurse, and women.

- Purple Cluster (17 keywords): In this cluster, customer service, empathy, leadership, display rules, emotional commitment, emotion regulation, and authenticity are located.

- Turquoise Cluster (6 keywords): This cluster's leading words are autonomy, emotional management, emotional regulation, and emotional dissonance.

- Orange Cluster (4 keywords): The main keywords of this cluster are culture, hospitality, human resources management, and tourism.

- Brown Cluster (2 keywords): The principal keywords are deep acting and surface acting.

In all the clusters above, emotional labor (968) is the main keyword, followed by burnout (182), surface acting (167), job satisfaction (136), deep acting (121), and emotional exhaustion (105).

5. CONCLUSION

This study examined emotional labor research using bibliometrics and science mapping analysis. Data was collected from the Web of Science (WOS) database and subsequently analyzed using the VOSviewer software. The analysis encompassed bibliometric and science mapping, investigating publication trends, leading authors, institutions, journals, and countries. Furthermore, the study delved into co-authorship among countries, bibliometric coupling of institutions, co-citation of sources, and the co-occurrence between keywords, all visualized on network maps.

The results reveal that publication trends have experienced a notable rise, particularly since 2005. The most productive and cited author on emotional labor is Alicia A. Grandey; The USA stands out as the most productive country, the most influential journal Frontiers in Psychology, and the most effective institution is Pennsylvania State University. Country co-authorship analysis reveals that the United States has strong cooperation with other countries, such as Canada, South Korea, Germany, Singapore, China, the United Kingdom, and Australia. According to keyword analysis, burnout, surface acting, job satisfaction, deep acting, and emotional exhaustion emerge as the top five common keywords in research on emotional labor, in that order. Penn State University stands out as the best institution in bibliometric coupling, followed by the University of Akron and National Sun Yat-sen University. The Journal of Applied Psychology, Academy Management Journal, and Journal of Organizational Behavior are frequently cited sources.

Although the research draws a comprehensive picture of publications on emotional labor, it has some limitations. Given the restriction to the WoS database for data analysis, it's worth noting that bibliometric outcomes might vary if data from sources other than WoS are utilized (Mongeon & Paul-Hus, 2016; Cansun & Arık, 2018). The study's critical limitations include the exclusion of international databases such as Scopus and Pubmed, national databases of countries, and other sources that are not circulated online. Future research can support this study by working with more comprehensive sources covering more data on interpreting emotional labor. The findings have shown valuable insights into the emotional labor literature with bibliometric and scientific mapping analyses. This study on emotional labor will guide future researchers seeking a more profound understanding of this field.

The research is one of the first examples in the relevant literature conducted using bibliometric techniques. The scope of the publications and their characteristics within the scope of the research in the world literature has been revealed through the study. This general framework contributes to researchers who follow the developments worldwide and enrich their studies. The information presented has been analyzed in an integrated manner, including the direction in which the trends in the field have developed. Regarding the results obtained, essential data will be provided on research profiles and trends by presenting to the readers which countries and educational institutions actively address emotional labor and related concepts in the focus of current discussions and developments in the world. In the light of these insights, developing trends can be determined, focal points can be defined, and focal points of future research can be predicted.

DECLARATION OF THE AUTHORS

Declaration of Contribution Rate: The authors have equal contributions.

Declaration of Support and Thanksgiving: No support is taken from any institution or organization.

Declaration of Conflict: There is no potential conflict of interest in the study.

REFERENCES

Arik, B. T., & Arik, E. (2015). World Englishes from a citation index perspective. *Journal of. English As An International. Language, 10*, 1–19.

Ashforth, B. E., & Humphrey, R. H. (1993). Emotional labor in service roles: the influence of identity. *The Academy of Management Review, 18*(1), 88–115. https://doi.org/10.2307/258824

Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "People Work". *Journal of Vocational Behavior*, *60*(1), 17-39. https://doi.org/10.1006/jvbe.2001.1815

Chou, H. Y., Hecker, R., & Martin, A. (2012). Predicting nurses' well-being from job demands and resources: A cross-sectional study of emotional labour. *Journal of Nursing Management, 20,* 502–511. https://doi.org/10.1111/j.1365-2834.2011.01305.x

Crane, D. (1969). Social structure in a group of scientists: A test of the invisible college hypothesis. *American Sociological Review. 34*(3), 335-352.

Grandey, A. A. (2000). Emotion regulation in the workplace: A new way to conceptualize emotional labor, *Journal of Occupational Health Psychology*, *5*(1), 95–110. https://doi.org/10.1037/1076-8998.5.1.95

Grandey, A. A., Diefendorff, J. M., & Rupp, D. E. (2013). Bringing emotional labor into focus: A review and integration of three research lenses. In *Emotional labor in the 21st century: diverse perspectves on emotion regulation at work* (p. 3-27). Taylor and Francis. https://doi.org/10.4324/9780203100851

Grandey, A. A., & Diamond, J. A. (2010). Interactions with the public: Bridging job design and emotional labor perspectives. *Journal of Organizational Behavior*, *31*(2-3), 338–350. https://doi.org/10.1002/job.637

Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, *2*(3), 271-299. https://doi.org/10.1037/1089-2680.2.3.271

Gupta, N., & Chakravarty, R. (2021). Trends in IoT research: a bibliometric and science mapping analysis of internet of things. *Library Philosophy and Practice*, *5269*, 0_1-18.

Hochschild, A. R. (1983). *The managed heart: the commercialization of human feeling*. Berkeley, CA. University of California Press.

Hsieh, C. W., Guy, M. E., & Wang, D. (2019). Bibliometric mapping of emotional labor studies in public administration. *Journal of Public and Nonprofit Affairs*, *5*(3), 240-260. https://doi.org/10.20899/jpna.5.3.240-260

Kessler, M. (1963). Bibliographic coupling between scientific papers. *American Documentation*. *14*(1), 10-25.

Mastracci, S. H., Newman, M. A., & Guy, M. E. (2010). Emotional labor: why and how to teach it. *Journal of Public Affairs Education, 16*(2), 123–141. https://doi.org/10.1080/15236803.2010.12001590

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics, 106,* 213–228. https//doi.org/10.1007/s11192-015-1765-5

Morris, J. A., & Feldman, D., C. (1996). The dimensions, antecedents, and consequences of emotional labor. *Academy of Management Review*, *21*(4), 986-1010.

Micciche, L. (2020*). The things we carry: Strategies for recognizing and negotiating emotional labor in writing program administration*. University Press of Colorado.

Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of Documentation, 25,* 349-9.

Steinberg, R. J., & Figart, D. M. (1999). Emotional labor since: The managed heart. *The Annals of the American Academy of Political and Social Science*, *561*(1), 8–26.

Van Eck, N. J., & Waltman, L. (2009). Software survey: VOSviewer a computer program for bibliometric mapping. *Scientometrics*, *84*(2) ,523–538. https://doi.org/10.1007/s11192-009-0146-3

Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact: Methods and practice* (p. 285–320). Springer International Publishing.

Yang, S. B., & Guy, M. E. (2015). Gender effects on emotional labor in Seoul metropolitan Area, *Public Personnel Management*, *44*(1), 3-24.

Zhang, Q., & Zhu, W. (2008). Exploring emotion in teaching: Emotional labor, burnout, and satisfaction in Chinese higher education. *Communication Education*, *57*(1), 105-122.

Zhao, D., & Strotmann, A. (2015). Analysis and visualization of citation networks. *Synthesis Lectures on Information Concepts, Retrieval, and Services, 7*(1), 1-207. https://doi.org/10.1007/978-3-031-02291-3

Zong, Q. J. (2013). A review of social commerce research. *Journal of Intelligence*, *32,* 117-121.