

Mental Health Status and Influencing Factors of College Counselors Based on Social Psychology

Yong Ye, M. Sc

Yong Ye, Lecturer, School of Marxism, Chongqing Jiaotong University, Chongqing 400074, China.

Correspondence LecYe; qye7297575@163.com

Objectives: In order to further improve the mental health of college counselors, a recommendation algorithm is proposed based on social psychology to study the mental health status and influencing factors of college counselors. **Methods:** This algorithm analyzes the influencing factors of the user's mental health by calculating the feature vector on the basis of user's preference and similarity for the social environment resource. The matrix vector of resource similarity is constructed by the calculated cosine similarity, and the context modeling hierarchical model is constructed. **Results:** The user's preference matrix for resources is calculated, so that a personalized recommendation algorithm based on label and collaborative filtering is proposed. Finally, the algorithm and model proposed are validated. Experiments show that when the value of N is 10 or 15, the recommendation algorithm by label can improve the recommendation accuracy and recall rate, which indicates that the proposed algorithm can significantly improve the quality of recommendation results. **Conclusion:** Therefore, the algorithm proposed can effectively improve the recommendation quality of college counselors' choice of colleges to alleviate psychological stress.

Keywords: social psychology; college counselor; mental health status; influencing factor

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Counselors, an indispensable part of the university's faculty, require us to pay more attention to the counselor's physical and mental health ¹. Because the physical and mental health status of the counselors is not only related to them, but also has a great impact on the growth and development of college students. In recent years, suicides and other incidents among college counselors have occurred from time to time. For the frequent occurrence of such unfortunate incidents, the deeper thinking behind this incident should be paid more attention ². College counselors are an important "bridge" for connecting college students with colleges as well as college students and society. The state, universities, and all walks of life should value them enough, and all aspects should pay close attention to the physical and mental health

development of college counselors ³. The early domestic higher education theory and practice circles paid more attention to the health status of teachers in primary, secondary and high schools. So there are many related researches on these teachers' groups⁴. However, most of them are based on the theory of mental health education, the mental health status has many influencing factors, among which the social environment is one of its important influencing factors ⁵. Based on this, it is of great significance to the study of the mental health status and influencing factors of college counselors from the perspective of social psychology.

Aiming at the multi-level comprehensive analysis of the psychological status and influencing factors of college counselors, a recommendation algorithm based on social labeling and collaborative filtering is proposed to construct a hierarchical model of

situational modeling, which can analyze and study the psychological status and influence factors of college counselors. By using the tag as the information embodying the user's interest preference and resource characteristics, this algorithm adopts the TFIDF idea to reduce the weight of the popular tag. And the feature vectors of the tag of the user and the resource are generated according to the multi-dimensional relationship of the user, the tag and the resource. Then the user's preference for the resource and similarity are calculated. Moreover, the user's preference value for other resources is predicted based on the user's historical behavior. Finally, Top-N recommendation results are generated according to sorting the predicted preference value, which greatly improves the overall reliability of the impact factor.

Here, a recommendation algorithm is proposed based on label and collaborative filtering. By generating the user's context information of user behavior, the types of resources included in the recommendation results are predicted, which can improve the accuracy and diversity of recommendations and user's satisfaction. The effectiveness of the algorithm is verified through experiment analysis, solving the problem that the traditional collaborative filtering algorithm utilizes the number of items or resources shared by different users to ignore the characteristics of the resources themselves, which has certain innovation.

The mental health status and influencing factors of college counselors is studied from the perspective of social psychology, and a hierarchical model of situational modeling is constructed. Based on the social labeling and collaborative filtering principle, the recommendation algorithm is proposed. Then the main principle and implementation flow of model and algorithm are analyzed. Finally, the effectiveness of the proposed algorithm and model is verified by experiments, which provides an effective analysis method for comprehensively studying the mental health status and influencing factors of college counselors.

In recent years, relevant researches on the mental health of college counselors have begun to increase and significant results have been achieved. Shelton A J used the Mental Symptom Checklist (SCL-90) to

establish a measurement model. The results showed that on the whole, the mental health level of effective subjects was lower than the national norm and the 9 factors of SCL-90 scale scored higher than the national norm, with significant differences, reflecting that the mental health of college counselors in A college was not optimistic⁶. Samples Hillary used structural equation model to examine the factors affecting job burnout of college full-time counselors in Guangdong and Jiangxi from various perspective. The results showed that the correlations between the counselors' job stress, role perception, social support, self-efficacy and career burnout were 0.554, 0.675, 0.349, and 0.362 and all reached significant levels⁷. Chiu established a model of influencing factors related to the occupational burnout of college full-time counselors with good fitting. The results showed that the total effect of college counselors' work stress on burnout was largest, accounted for 45.58% according to the path analysis⁸. Bernecker S L conducted a questionnaire test on 114 student counselors from 5 universities in Nanjing using the Mental Health Self-Assessment Scale (SCL-90). The results showed that 4.4% of college counselors had serious psychological problems and 19.3% of college counselors carried mild psychological problems⁹. Macintyre A conducted a survey of 80 college counselors in Guangzhou with the Symptom Checklist (SCL90). The results showed that college counselors had poor mental health and the overall detection rate was 4.1%¹⁰. Ghassemi A used the Symptom Checklist (SCL-90) to survey 305 college counselors in Chongqing. The results showed that there was a significant positive correlation between each factor of career pressure and each dimension of mental health among college counselors in Chongqing¹¹. Zyoud used the SCL-90 scale to investigate the mental health of 56 college counselors in Zhejiang Province. The results showed that there were significant differences in the scores of different genders on the three factors of interpersonal sensitivity, paranoia and psychosis¹². Badra M used independent sample t-test and one-way analysis of variance to test the demographic differences of psychological health status and job burnout of college counselors. It was found that the score of anxiety factor of counselors who had been working 3-5 years was significantly higher than that of counselors in other

groups. And there was significant difference in anxiety factors in terms of monthly income¹³. Zhao N used correlation analysis and regression analysis to analyze the relationship between mental health status and job burnout of college counselors. The results show that emotional exhaustion and depersonalization are significantly positively correlated with mental health and could positively predict mental health¹⁴. He J used the Eysenck Personality Questionnaire (EPQ) to conduct a questionnaire test on 118 student counselors from five universities in Beijing. The results showed that the mental health of college counselors was slightly better than the national norm and was significantly better than that of ordinary college teachers¹⁵.

It can be seen from the above studies by scholars that many scholars have used a variety of methods to conduct a lot of research on the mental health status of college counselors and also to verify the effectiveness of the research methods. From the perspective of social psychology, the socialization of the role of college counselors is conducive to solving the problem of role conflicts. However, there is less the current research in this area. Therefore, based on the previous studies, the mental health status and influencing factors of college counselors is studied based on the perspective of social psychology, which has important practical and theoretical significance.

METHODS

Hierarchical Model of Situational Modeling Based on Mental Health Status and Influencing Factors of College Counselors

College counselors, as a special team of college teachers, have the closest contact with students and are responsible for various tasks such as students' ideological and political education, learning and guidance, mental health counseling and class affairs management. The quality of the counselor that is based on the psychological quality can directly affect the overall development of the college students. What is the psychological quality of the counselor? What is their mental health? What are the main factors affecting the mental health of counselors? The study of social psychology is not a psychology research

represented by society. Or the object of research is not society, but the reaction of the social representation of the social psychology association for individuals. And social psychology studies the performance of individual or certain groups of social psychosocial phenomena. While this pattern of this psychological influence is reversed, with the external influence of the social environment on people. Then a comprehensive psychological quality is formed. The social evaluation of college counselors is a barometer of the socialization status of college counselors. The professionalization and professional development are the premise of the socialization of college counselors. The social evaluation of college counselors not only reflects the degree of professionalization and professional development of college counselors, but also reflects the health status of their development. From the perspective of social psychology, the socialization of the role of college counselors is conducive to solving the problem of role conflict. Therefore, the mental health status and influencing factors of college counselors are analyzed from the perspective of social psychology by establishing a hierarchical model of situational modeling that determines a recommendation strategy suitable for this object according to the location of the object, such as news, music, movies and other digital media types, which is a 3-dimensional vector space. And its vector model is expressed as equation (1):

$$\langle User, MC, RS \rangle \quad (1)$$

User represents the user who generates user behavior in the recommendation system, where $User \in U$; MC (Media Category) represents the media category that is a media type of user behavior generated by the user, such as news, movies, music, etc., and $MC \in DMA$. RS (Recommend Strategy) represents a recommendation strategy, and determines a recommendation strategy suitable for the user according to one or more kinds of user and resource characteristics. The recommendation strategy is encapsulated in the recommendation engine, including content-based recommendation suitable for news media recommendation and collaborative filtering recommendation or hybrid recommendation engine suitable for movies, music and so on. High-level modeling requires a series of rules to determine the recommended strategy for users based on user and resource characteristics.

The recommended algorithm defines rules: if MC=Movie, then RS=Recommend Engine_i can be launched, indicating that Recommend Engine_i can be selected as the recommended strategy. And Recommendation Engine_i refers to some recommendation algorithm used in the recommendation system. The low-level model of situational modeling mines context information according to the current category and browsing path of the object to predict the recommended target result. The purpose of it is to provide user and media data for the recommendation engine, which is a 5-dimensional vector space and whose vector model is as shown in equation (2):

$$\langle User, MC, UBR, CB, RRP \rangle (2)$$

User represents an object representing a user who generates user behavior in the recommendation system, and $User \in U$. UBR (User Behavior Route) indicates that the behavior path that user used, that is, the history record of the user's behavior in the recommendation system. This layer model mainly refers to the collection of labels that users use more frequently in user historical behavior records. The user utilizes the behavior path UBR to obtain the user's history record from the storage subsystem of recommendation system and count the tag set T commonly used by the user. CB (Current Behavior) records the resources involved in the user's current behavior, such as clicking on a certain type of resource, which can be represented as a collection of clicked resources $\{click : i_1, i_2, i_3 \dots\}$, of which $click \in BT$. The resources corresponding to the current behavior of the user is obtained to count the number of attributes of the resource to provide support for predicting the recommended resource. RRP (Recommend Resource Predicting) is a recommended resource prediction and an attributes included in the prediction of recommendation result according to the user history and the current behavior. In order to improve the diversity of recommendation results, the recommended resources can be used to predict this dimension. And the preliminary recommendation results generated by the recommendation algorithm are filtered. By merging the different attributes, the final recommendation results are generated.

Recommendation Algorithm Based on Social Tagging and Collaborative Filtering

The user's preference for resources can be mined by the label used of the features of the two dimensions of the user and the resource according to the record that users label the resource by tags. The tag feature vectors of users and resources are based on the TfIdf idea in the field of information retrieval, which not only uses tags to represent characteristics of users and resource, but also calculates the TfIdf value to represent the importance of each tag to users and resources. Tf is defined a frequency that indicates how often a particular user uses a tag or how often a resource is tagged by that tag, which can be expressed by equation (3):

$$\frac{n_{ut_j}}{n_{ut}} \log \frac{M}{n_{t_ju}} (3)$$

Idf is defined a representation of the user using a tag to all users who have used the tag, or the representation of some resource of a tag to all resources using this tag, which can be expressed by equation (4):

$$\frac{n_{it_j}}{n_{it}} \log \frac{N}{n_{t_ji}} (4)$$

The data set used in this experiment is the Lastfm data set published at the 5th recommendation system conference. Lastfm is a music site that allows users to label music and singers with tags. The data set has 1,892 users, 11,946 tags and 17,632 resources, with a total of 186,479 tag records. This experiment is based on the fact that each label has been used more than 10 times, and each user has tagged at least 10 times to the music or singer's. Then the corresponding records are selected as the data set that is randomly divided into 90% and 10%. 90% of the data is taken as a training set, and the rest is part of the test set. Regarding the metrics of recommended quality, the accuracy of the recommendation is the most basic indicator for evaluating the recommendation algorithm. In this experiment, precision and recall are used as the standard for measuring the pros and cons of the algorithm. The precision rate indicates the probability that the user is interested in the resources recommended by system, and the recall rate indicates the probability that a user's favorite product is recommended. The higher the accuracy

and recall rate, the better the effect of recommendation. In addition, the F-measure indicator metric algorithm is also adopted.

RESULTS

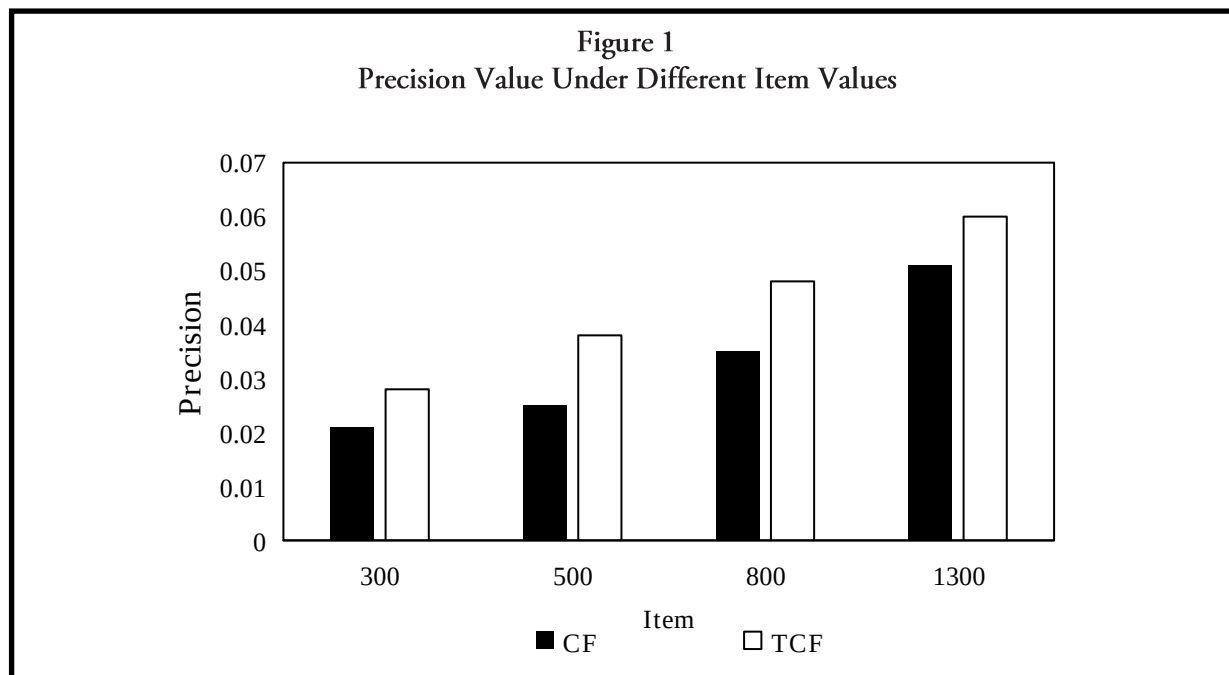
Experimental Environment and Experimental Objects

The data set used in this experiment is the LaSt.fin and Delicious data sets published at the 5th recommendation system conference. Delicious is a bookmarking site that allows users to tag books with tags. The Delicious data set has 1,892 users, 11,946 tags and 17,632 resources, with a total of 406,479 tag records. This experiment is based on the principle that each label has been used more than 10 times, and each user has tagged at least 10 times to the book. Then the corresponding records are selected as the data set that is randomly divided into 90% and 10%. 90% of the data is taken as a training set, and the rest is part of the test set. This experiment still uses the precision, recall rate and F-measure commonly used in the recommendation algorithm as the standard for measuring the pros and cons of the algorithm. The respondents are mainly college counselors represented by Anhui Agricultural University. As of August 2013, there were 296 counselors at Anhui Agricultural University, covering a total of 11 disciplines, who were distributed in 16 colleges across the school, as shown in the following. This study mainly uses self-made questionnaires and 90 symptom lists (Symptom checklist90), also known as "symptom self-rating scale", referred to as SCL-90, to conduct an assessment for the mental health status of college counselors who are mainly represented by the Anhui Agricultural University. The home-made questionnaire mainly involves demographic

information related to the counselor. SCL-90, compiled in 1975 by L.R. Derogatis, has a total of 90 items. Each of that draws a 5-level scoring system (1-5 are no, very light, moderate, heavy, serious), including somatization, obsessive-compulsive symptoms, interpersonal sensitivity, depression, anxiety, hostility, horror, paranoia, psychosis, and others. This scale has a large amount of information and rich symptoms. In the mental health assessment, SCL-90 is the most widely used assessment tool, which can guarantee reliability and validity to a certain extent. Finally, the survey results are analyzed by statistical software SPSS13.0.

Comparison Experiment of Algorithm Performance and Result Analysis

In the experiment, the number of Item is selected from 300, 500, 800, 1300 and other different values to calculate the recommendation results. Compared with the traditional recommendation algorithm, it is found that the number of Item of the recommendation in the Top-N can greatly affect the recommendation result. The CF algorithm is used to represent the resource-based collaborative filtering algorithm, which can calculate the similarity between items based on the resource records browsed by the user and generate the recommendation results. The TCF algorithm is the recommendation algorithm for combining tags and collaborative filtering proposed in this research. The CF++ algorithm is an algorithm based on user behavior only used when seeking project similarity. The experimental results of recommendation algorithm based on the label and collaborative filtering are shown in Figure 1, Figure 2, Figure 3, Figure 4 and Figure 5.



The accuracy of the TCF algorithm and the CF algorithm when Item takes different values are shown in Figure 1. It can be seen from the experimental diagram 3.2 that as the number of Item increases gradually, the accuracy of the TCF

algorithm and the CF algorithm increases gradually. However, the accuracy of the TCF algorithm proposed here is higher than that of the CF algorithm.

Figure 2
Precision Values under Different N Values

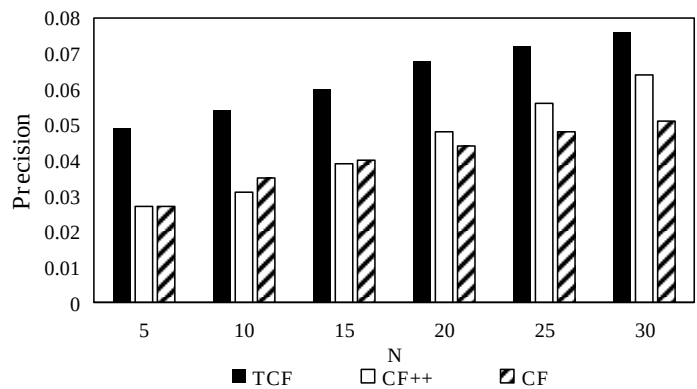


Figure 3
Recall Values under Different N Values

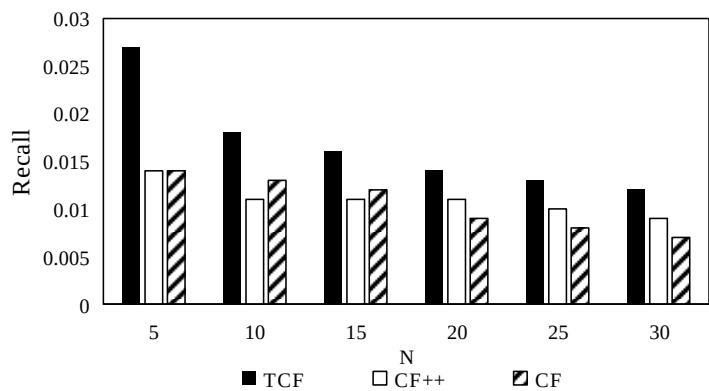
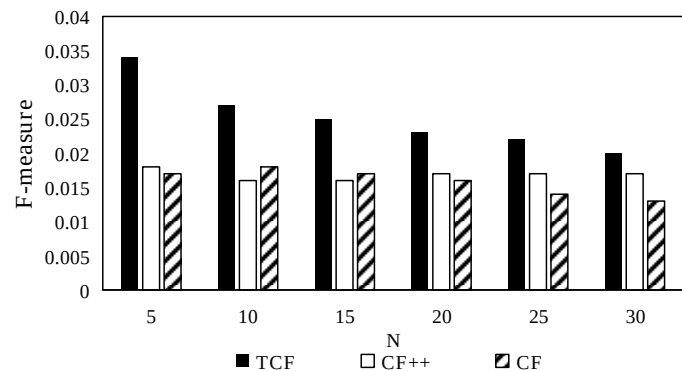
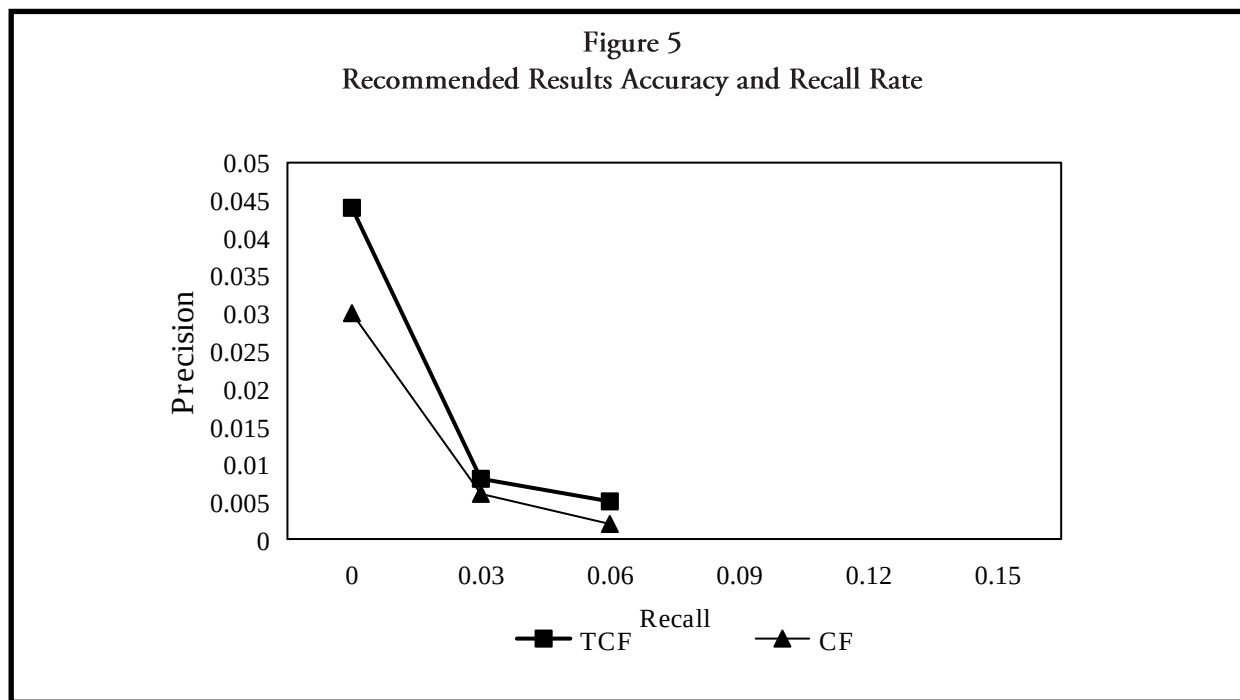


Figure 4
F-measure Values With Different N Values



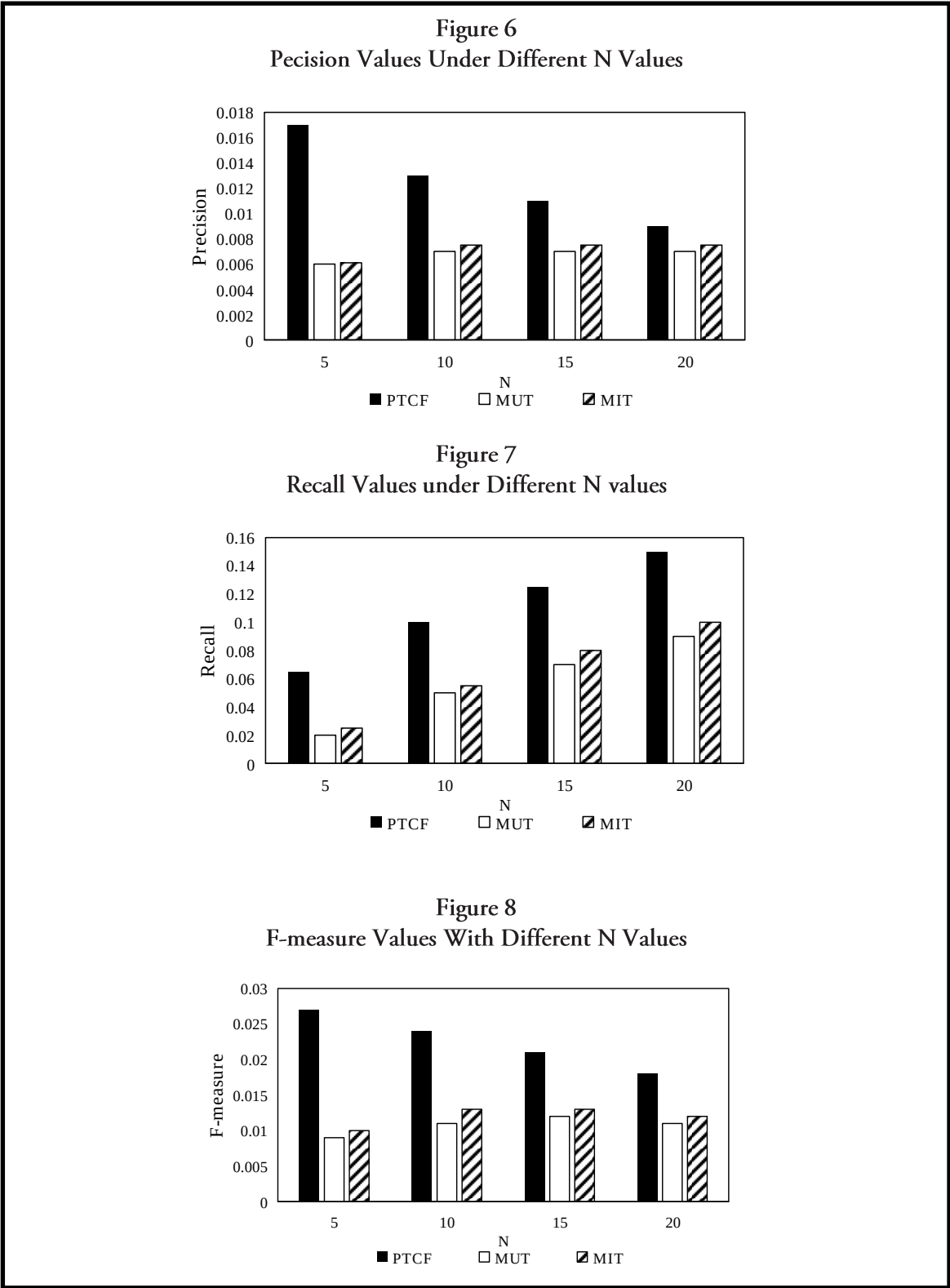
The accuracy, recall, and F-measure value of the CF, CF++ and TCF algorithms when the Item value is 1300 and the N values recommended by Top-N are 5, 10, 15, 20, 25, and 30, are shown in Figures 2, 3, and 4 respectively. It can be seen from the experimental diagrams 2, 3 and 4 that the adopted three evaluation criteria of TCF algorithm based on label and collaborative filtering proposed, namely accuracy rate, recall rate and F-measure value, are superior to that of

CF and CF++. When the value of N in the Top-N is 5, the accuracy, recall rate and F-measure value of the CF++ algorithm and the CF algorithm are basically equal; when the N value is 10 or 15, the accuracy, recall rate and F-measure of the CF algorithm are slightly better than that of CF++ algorithm. As the value of N increases, the CF++ algorithm is better than the CF algorithm in each evaluation index of algorithm.



The changes in the accuracy and recall rate of the TCF algorithm and the CF algorithm are shown in figure 5, as the value of N of the Top-N increases as well as the Item value takes 1300. It can be seen from Figure 4 that as the accuracy increases, the recall rates of the TCF algorithm and the CF algorithm are gradually reduced, but the value of the TCF algorithm is higher than that of the CF algorithm. Experiments show that the use of tags can effectively improve the recommendation accuracy and recall rate. The proposed tag-based and collaborative filtering recommendation algorithm, namely TCF algorithm, can significantly improve the quality of recommendation results. The parallel recommendation algorithm using tags is studied in this chapter. So the parallel recommendation

algorithm implemented by Mahout is compared with the parallel digital media recommendation algorithm proposed in this research. The PTCF algorithm is a proposed parallel recommendation algorithm based on label and collaborative filtering. The MUT algorithm, as the collaborative filtering algorithm based on Mahout, represents the user preference for resource based on the importance of the label to the user. The MIT algorithm represents the user preference for resource based on the importance of the label to the resource and uses Mahout's resource-based collaborative filtering algorithm to recommend, which is an algorithm used for user behavior only when seeking project similarity. The results of comparison experiment of the parallel recommendation algorithm and the Mahout are



It can be seen from Figure 6, Figure 7 and Figure 8 that compared with the Mahout-based collaborative filtering recommendation algorithm, the PTCF

algorithm proposed has higher accuracy, recall rate and F-measure for the recommendation results. The accuracy decreases with the gradual increase of the N value in Top-N, the recall rate increases with the gradual increase of the N value in Top-N, and F-measuer decreases with the gradual increase of the value of N. It can be seen that the accuracy has a great influence on the quality of the recommendation algorithm.

Empirical Analysis and Results

The survey is conducted a questionnaire survey on

mental health status of 296 counselors of Anhui Agricultural University by using the SCL-90 scale. 200 questionnaires are randomly distributed and 193 are collected, with recovery rate 96.5%, of which 177 are valid questionnaires, with effective rate 88.5%. The survey results of 177 valid questionnaires are analyzed and processed by statistical software SPSS13.0. Then the results of the mental health status of college counselors represented by Anhui Agricultural University are summarized.

Table1 Comparison of SGL-90 Factor and National Norm			
Factor	Annnong University Counselor N=177(M±SD)	National norm N=1338(M±SD)	P
F1. Somatization	1.69±0.71	1.37±.48	0.000
F2. obsessive-compulsive symptoms	1.78±0.76	1.62±0.58	0.000
F3. Interpersonal sensitivity	1.73±0.71	1.65±0.51	0.000
F4. Depression	1.87±0.76	1.50±0.59	0.000
F5. Anxiety	1.77±0.65	1.39±0.43	0.000
F6. Hostility	1.75±0.58	1.48±0.56	0.000
F7. Terror	1.42±0.39	1.23±0.41	0.000
F8. Paranoia	1.61±0.46	1.43±0.57	0.000
F9. Psychotic	1.56±0.48	1.29±0.42	0.000

When the single factor of SCL-90 ≥ 2 points, it indicates that the subject has "symptoms" on this item and there are certain psychological problems. It can be seen from Table 1 that the survey results of the SCL-90 factors of the Anhui Agricultural University counselor, compared with the national norm factors, shows that the nine specific factors of somatic, obsessive-compulsive, interpersonal-sensitive, depressed, anxious, hostile, terror, paranoia and psychosis of counselor in Anhui Agricultural University are higher than the national norm. The division of counselors of

Anhui Agricultural University by four working years: less than one year, 1-5 years, 6-10 years, and 11 years and above is shown in Table 2. Whether the counselors with different working years have different mental health status can be checked. In the 177 valid questionnaires of Anhui Agricultural University counselors, there are 4 people with a working life of less than one year, 85 people in 1-5 years, 31 people in 6-10 years, and 57 people in 11 years and above.

Table2
Comparison of Mental Health Status of Subjects With Different Working Years

Factor	Less than 1 year (M +SD)	1-5 years (M + SD)	6-10 years (M +SD)	Eleven years or more (M + SD)
F1. Somatization	1.50±.59	1.63±.49	1.82±.83	2.00±.35
F2. obsessive- compulsive symptoms	1.70±.71	1.83±.74	1.81±.66	1.90±.71
F3. Interpersonal sensitivity	1.72±.63	1.73±.28	1.62±.50	1.66±.47
F4. Depression	1.71±.54	1.74±.74	1.84±.65	1.73±.28
F5. Anxiety	1.66±.92	1.71±.61	1.86±.59	1.75±.78
F6. Hostility	1.66±.23	1.73±.69	1.64±.44	1.67±.29
F7. Terror	1.36±.50	1.39±.50	1.44±.40	1.43±.61
F8. Paranoia	1.62±.35	1.54±.62	1.49±.40	1.75±.82
F9. Psychotic	1.50±.71	1.48±.43	1.51±.47	1.60±.56
F10. Other	1.78±.91	1.61±.48	1.59±.50	1.86±.81

It can be seen from Table 2 that the highest scores among the 10 factors of the SCL-90 scale of the Anhui Agricultural University counselor who have worked for less than one year are other (other factors are mainly sleep and diet aspects). Compared with the counselors of the Anhui Agricultural University with a working life of 1-5 years, 6-10 years, and 11 years and above, the scores of 10 factors of the SCL-90 scales of the Anhui Agricultural University counselor with a working life of less than 1 year are lower than the other three groups tested.

DISCUSSION

College counselors should not only solve the ideological problems of college students, but also guide the professional learning of college students. How to improve the mental health of college counselors is crucial. Therefore, based on the perspective of social psychology, the mental health status and influencing factors of college counselors are analyzed by establishing a hierarchical model of situational modeling. And a recommendation algorithm based on socialized labeling and collaborative filtering is proposed to screen and analyze the effectiveness of ways to improve the psychological health level of college counselors. The results show that the recommendation algorithm based on collaborative filtering alleviates the data sparseness problem of the recom

mendation algorithm and solves the problem of resource cold start. From the results of the model analysis, it is indicated that the counselor's mental health level of Anhui Agricultural University with working for less than one year has best mental health. Furthermore, the scores of the 10 influencing factors of the counselor with a working life of less than one year are lower than those with other working years. The counselors with a working life of 5 years and above have a long working life in the counselor's position. Long-term handling of noisy and cumbersome student work may cause them to have a sense of burnout in their career. The interest in their work has declined, causing them to feel physically and mentally exhausted. Therefore, the algorithm proposed can effectively improve the recommendation quality and user satisfaction of digital media. However, there are still some problems to be solved in the practical application of this method. For instance, the quality of the label has a great influence on the result of the recommendation algorithm. Thus, how to improve the label quality is another problem that needs to be solved in practical applications.

Human Subjects Approval Statement

This paper did not include human subjects.

Conflict of Interest Disclosure Statement

None declared.

References

1. Badra M. College Students' Attitudes and Perception of the Therapeutic Competence of Counselors and Other Mental Health Professionals. *Dissertations & Theses - Gradworks*, 2015,29(4):236-243.
2. Bernecker S L, Banschback K, Santorelli G D, et al. A Web-Disseminated Self-Help and Peer Support Program Could Fill Gaps in Mental Health Care: Lessons From a Consumer Survey. *Jmir Ment Health*, 2017, 4(1):1-5.
3. Carrie Reif, Kari Much. #Socialmedia: A Preliminary Report of Social Networking Use Among University and College Counseling Center Mental Health Providers. *Journal of College Student Psychotherapy*, 2017, 31(2):1-8.
4. Chiu, Y, Chen, P, Ting, A, et al. Psychotherapy and Mental Health Counseling for Children with Attention-Deficit Hyperactivity Disorder (ADHD). *Value in Health*, 2018, 21(12): 191-192.
5. Ghassemi A E. Interprofessional Collaboration Between Mental Health Counselors and Nurses. *Creative Nursing*, 2017, 23(4):242-247.
6. He J, Fan F M. A study of the effects of group counseling on the mental health of college students from low income family-Based on positive psychology. *Chinese Journal of Clinical Psychology*, 2017, 14(4):490-501.
7. Lanfranchi M, Akinsulure-Smith, Adeyinka M. The Role of Mental Health Counselors in International Human Rights: Reflections on Counseling Services with Urban Refugees at the Refugee Law Project in Kampala, Uganda. *International Journal for the Advancement of Counselling*, 2018,45(9):1-22.
8. Macintyre A, Ferris, Daniel, Gon?alves, Briana, et al. What has economics got to do with it? The impact of socioeconomic factors on mental health and the case for collective action. *Palgrave Communications*, 2018, 4(1):10-15.
9. O'Dea B. School Counselors' Perspectives of a Web-Based Stepped Care Mental Health Service for Schools: Cross-Sectional Online Survey. *Jmir Mental Health*, 2017, 4(4):78-85.
10. Samples Hillary, Bandara Sachini, Olfson Mark, et al. Tobacco Screening and Counseling in the U.S.: Smokers With Mental Health and Substance Use Problems. *American Journal of Preventive Medicine*, 2018, 55(4):38-54.
11. Schwitzer A M, Moss Catherine B, Pribesh Shana L, et al. Students With Mental Health Needs: College Counseling Experiences and Academic Success. *Journal of College Student Development*, 2018, 59(1):3-20.
12. Shelton A J, Wang, Chiachih DC, Zhu, Wenzhen. Perceived Social Support and Mental Health: Cultural Orientations as Moderators. *Journal of College Counseling*, 2017, 20(3):194-207.
13. Xiao H, Carney D M, Youn S J, et al. Are we in crisis? National mental health and treatment trends in college counseling centers. *Psychological Services*, 2017, 14(4):407-423.
14. Zhao N, Min M A, Xin Z. Mental mechanism and the influencing factors of meaning in life. *Advances in Psychological Science*, 2017, 25(6):1003-1011.
15. Zyoud, Sa'ed H, Sweileh, Waleed M, Awang, Rahmat, et al. Global trends in research related to social media in psychology: mapping and bibliometric analysis. *International Journal of Mental Health Systems*, 2018, 12(1):4-9.