

2021 International Conference on Public Health and Data Science (ICPHDS 2021)

**Chengdu, China
9 – 11 July 2021**



**IEEE Catalog Number: CFP21Z20-POD
ISBN: 978-1-6654-2595-7**

**Copyright © 2021 by the Institute of Electrical and Electronics Engineers, Inc.
All Rights Reserved**

Copyright and Reprint Permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

****** This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP21Z20-POD
ISBN (Print-On-Demand):	978-1-6654-2595-7
ISBN (Online):	978-1-6654-2594-0

Additional Copies of This Publication Are Available From:

Curran Associates, Inc
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: (845) 758-0400
Fax: (845) 758-2633
E-mail: curran@proceedings.com
Web: www.proceedings.com

CURRAN ASSOCIATES INC.
proceedings
.com

2021 International Conference on Public Health and Data Science (ICPHDS) **ICPHDS 2021**

Table of Contents

Preface	xi
Committee Members	xii
Reviewers	xiii

Smart Health and Digital Health Applications

Different Thresholds in the Prediction of Chronic Obstructive Pulmonary Disease using Neural Network and Logistic Model	1
<i>Yumeng Tang (Hubei Provincial Center for Disease Control and Prevention, China), Lan Zhang (Hubei Provincial Center for Disease Control and Prevention, China), Qian Li (Hubei Provincial Center for Disease Control and Prevention, China), and Shuzhen Zhu (Hubei Provincial Center for Disease Control and Prevention, China)</i>	
Obesity Triggers COVID-19: Causal Discovery and Multiobjective Linear Programming Approach	6
<i>Yuchen Yang (Sichuan University, PR China) and Haoxuan Li (Sichuan University, PR China)</i>	
Computer Visualization of Moderation Analysis: Joint Moderation of Physical Activity and Diet-Health Knowledge in the Demand of Health Care Among Disabled Older Adults	10
<i>Wang Yibing (Shandong University, China), Tong Yawen (Shandong University, China), and Wang Haitao (Shandong University, China)</i>	
Health Assessment of Higher Education System Based on TOPSIS Model	15
<i>Xuanrui Liu (Yanbian University, China), Yajiao Wang (Yanbian University, China), Jing Shen (Yanbian University, China), and Jizhe Cui (Yanbian University, China)</i>	
Bibliometric Analysis of Facial Diagnosis Using Knowledge Mapping	20
<i>Rong Wang (Jinan University, China), XiangDong Ma (Jinan University, China), Kun Wu (Jinan University, China), Hui Xie (Jinan University, China), Yue Lou (Jinan University, China), and Xu Huang (Jinan University, China)</i>	
How COVID-19 Affects Health Status of Chinese Immigrants	24
<i>Qian Sun (Shandong University, Shandong) and Meiling Qi (Shandong University, Shandong)</i>	

The Effect of Social Capital on Health Among Chinese Older Adults: A Cross-Sectional Study Based on Chinese General Social Survey Database .28.....	28
<i>Yin Sun (Kunming University of Science and Technology, China), Xudong Zhang (Kunming University of Science and Technology, China), and Yuehong Han (Kunming University of Science and Technology, China)</i>	
The Promotion Effect of Innovation and Entrepreneurship Education on Medical Students' Mental Health Based on Stepwise Regression .33.....	33
<i>Jinping Liu (Changchun University of Chinese Medicine, China), Fang Xia (Changchun University of Chinese Medicine, China), Yanyin Cui (Changchun University of Chinese Medicine, China), and Zixu Hao (Changchun University of Chinese Medicine, China)</i>	
Big Data Analysis of South Asian Students' Acceptance Attitudes to Cosmetic Surgery in China .38.....	38
<i>Qingqin Du (Weifang Medical University, China) and Lesen Cheng (Weifang Medical University, China)</i>	
Research on a Remote and Digital Walking Program During the COVID-19 .42.....	42
<i>Qian Sun (Shandong University, China), Cui Mao (Shandong University, China), Meiling Qi (Shandong University, China), and Ping Li (Shandong University, China)</i>	
Early Childhood Education Based on Big Data .46.....	46
<i>Xinxiang Zhao (Management of business administration, USA)</i>	
Study on Multi-Subject Collaborative Governance Mechanism in Poverty Alleviation by Developing Traditional Chinese Medicine (TCM) Industry .50.....	50
<i>Yukun Zheng (Hubei University of traditional Chinese Medicine, China) and Li Chen (Hubei University of traditional Chinese Medicine, China)</i>	
A Model For Precisely Locate And Predict Trends For Forest Fire .55.....	55
<i>Kun Jing (University of Electronic Science and Technology of China, China), Yujie Chen (University of Electronic Science and Technology of China, China), Yutong Jiang (University of Electronic Science and Technology of China, China), and Zhiguang Qin (University of Electronic Science and Technology of China, China)</i>	
Crisis and Disaster Management of Local Hotels Based on Statistics in Ningbo During COVID-19 .59.....	59
<i>Lingke Wang (Wenzhou-Kean University, China)</i>	
Evaluation Model of Personal Information Security Awareness Based on TOPSIS and k-Means .68...	68
<i>Zhang Ziqian (Hohai University, China) and Qiu Lei (Hohai University, China)</i>	
Terminal Management Method Based on IPv6 Cross Domain Roaming .73.....	73
<i>Liguo Wang (State Grid Shanxi Electric Power Company, China), Chenni Dong (State Grid Shanxi Electric Power Company, China), Yaning Meng (State Grid Shanxi Electric Power Company, China), Tianyuan Wang (Taiyuan University of Technology, China), Liang Gu (State Grid Shanxi Electric Power Company, China), Xixi Zhao (State Grid Shanxi Electric Power Company, China), Xin Ma (Taiyuan University of Technology, China), Haichuan Sun (State Grid Shanxi Electric Power Company, China), Xin Gong (State Grid Shanxi Electric Power Company, China), and Xiaorong Duan (State Grid Shanxi Electric Power Company, China)</i>	

Research on the Relationship between Teachers' Occupational Stress and Mental Health in Shaoguan Primary and Middle Schools by SPSS24.0 .77.....	.77
<i>Hongxiu Tan (Shaoguan University, China) and Qienshen Guo (Shaoguan University, China)</i>	
Breast Tumor Ultrasound Image Classification Method Based on the Fusion of Deep Network Features and Texture Morphological Features .81.....	.81
<i>Wei Liu (Huaqiao University, China), Peizhong Liu (Huaqiao University, China), Xiuming Wu (Fujian Medical University, China), and Yongzhao Du (Huaqiao University, China)</i>	
Convolutional Neural Networks for Epileptic Disease Detection .86.....	.86
<i>Junxi Chen (University of South China, China), Xiaolong Ge (University of South China, China), Shichuang Yang (University of South China, China), and Xiaofeng He (University of South China, China)</i>	
Research on the Current Status of Chronic Pain Suffered by Old People in Nursing Homes and their Demand for Mobile Health Application (APP) .90.....	.90
<i>Lifang He (Xiangnan University, China), Yongmei He (Xiangnan University, China), and Pan Li (Xiangnan University, China)</i>	
Ideas on the Construction of the Telemedicine System for the Gestational Diabetes Mellitus Based on the Clinical Decision Support System .96.....	.96
<i>Li Xiuxiu (Peking Union Medical College, China), Gao Xing (Peking Union Medical College, China), Wang Yan (Peking Union Medical College, China), Zhang Yue (Peking Union Medical College, China), Wang Yuzhu (Peking Union Medical College, China), and Hu Hongpu (Peking Union Medical College, China)</i>	
A Data-Based Research on China's National Image in COVID-19 Epidemic Reports Covered by German Mainstream Media .101.....	.101
<i>Bai Ying (Xi'an Fanyi University, China)</i>	
Challenges and Countermeasures for Medical Social Workers when Serving Low-Income Patients.106	106
<i>Junjie Dong (Kunming Children's Hospital, China), Yawen Yang (Kunming Children's Hospital, China), and Li Liu (Kunming Children's Hospital, China)</i>	
The Research and Analysis of Student Health Status on the Basis of Physic Fitness Test' Data* .110.....	.110
<i>Xiang Gao (Graduate Studies De La Salle University, Philippines); Guangxi Guangxi University of Chinese Medicine), Maryli F. Rosas (Graduate Studies De La Salle University, Philippines), Yipeng Zhang (Graduate Studies De La Salle University, Philippines; Guangxi Guangxi University of Chinese Medicine), Mengvi P. Gatpandan (Graduate Studies De La Salle University, Philippines), Paulino H. Gatpandan (Graduate Studies De La Salle University, Philippines), and Daniel Jr. Dasig (Graduate Studies De La Salle University, Philippines)</i>	
Track and Trace Policies in South Korea and UK During Covid.19 .116.....	.116
<i>Zongyuan Wu (University of California Irvine, USA), Xiyuan Chen (Fujian University of Traditional Chinese Medicine, China), and Juejue Wang (High School Attached to Northeast Normal University, China)</i>	
The Effect of Childhood Socioeconomic Status on Depression in Early Adulthood: Evidence from A Linear Regression Model .121.....	.121
<i>Zhu Xining (Chengdu Medical College, China)</i>	

Named Entity Recognition of Liver Cancer Data Based on Damped Pointer Network and Dynamic Fusion .129.....
Liang Zhang (Shenzhen University, China), Bin Qin (Shenzhen University, China), Ren Cai (Shenzhen University, China), and Zhili Wang (Shenzhen University, China)

Public Health and Medical Data Monitoring

Impact of COVID-19 on India's Public Health from 2019 to 2021 .133.....
Xiaochen Xia (University of London, United Kingdom)

Study on the Impact and Countermeasures Caused by International Public Health Emergency Response Measures-- Based on COVID-19 .139.....
Liu Jing Yu (NO.1900 Wenxiang Road, China)

Study on the Current Situation and Influencing Factors of Primary Diagnosis At The Grassroots Level between Community Health Service Institution and Hospital .148.....
Gan Qihui (Guangdong medical university, China), Xiao Junhui (Guangdong medical university, China), and Ding Shulin (Guangdong medical university, China)

Research on Digital Government Governance in Public Health Emergencies .153.....
Defa Cai (Harbin University of Commerce, China) and Bingqian Chen (Harbin University of Commerce, China)

Study on tax Administration Design and Management of Incentive Emergency Response to Public Health Emergencies in Response to COVID-19 .158.....
Defa Cai (Harbin University of Commerce, China) and Xiaoyu Ma (Harbin University of Commerce, China)

Research on Local Digital Government in China's Public Health Crisis .162.....
Xinhao Liu (Harbin University Of Commerce, China) and Dandan Shi (Harbin University Of Commerce, China)

A Network Pharmacology Approach to Uncover the Key Ingredients in Chuanxiong Rhizoma and Their Anti-Ischemic Stroke Mechanism .167.....
Su Hongfei (Huazhong University of Science and Technology, China), Zeng Peng (Huazhong University of Science and Technology, China), Fang Yingyan (Hubei Polytechnic University School of Medicine, China), and Wang Qiyi (Bengbu Medical College, China)

SVM-Based Microwave Breast Tumour Classification .174.....
Ang Chen (Hohai University, China), Yuzhuo Gu (Northeastern University, China), and Songchun Zhang (Hunan University, China)

The Effect of Stressful Life Events on College Students' Depression: A Moderated Mediating Model .178.....
Bo Lin (Guangzhou College of Technology and Business, China) and Junbo Ma (Guangzhou College of Technology and Business, China)

Analysis of Plantar Pressure in Elderly Diabetic Patients with Peripheral Neuropathy .184.....
Zijun Cao (Tianjin University of Science & Technology, China), Fang Wang (Tianjin University of Science & Technology, China), Yaoguang He (Tianjin University of Science & Technology, China), Yu Zhang (Tianjin University of Science & Technology, China), and Jianguo Zhang (Tianjin University of Science & Technology, China)

The Relationship between Negative Life Events and Maternal Depression: Multiple Intermediate Effects .188.....	188
<i>Xueying Jin (WeiFang Medical University, China), Yixuan Shen (XiaMen Technical College, China), Wenjuan Xing (Qilu Normal University, China), and Zheng Wang (Qilu Normal University, China)</i>	
Mechanism of Chinese Medicine Hedan Tablets on Anti-Hyperlipidemia by Molecular Simulation Study .193.....	193
<i>Weiye Tao (Guangdong Pharmaceutical University, China) and Brook Xiao (St.Paul's School)</i>	
Effects of Changes in Rural Household Income on Health Care Expenditure in China .197.....	197
<i>Chen Yao (China West Normal University, China)</i>	
Investigation and Research on Children's Sensory Education from the Perspective of Montessori and Sensory Integration .202.....	202
<i>Min Xu (Zaozhuang University, China) and Quanhui Wu (Zaozhuang University, China)</i>	
Data on the Association Between Vitamin D and Perinatal Depression .206.....	206
<i>Peiwan Fang (Foshan University, China)</i>	
The Relationship between Maternal Self-Esteem and Depression: Multiple Intermediate Effects .213.....	213
<i>Xueying Jin (WeiFang Medical University, China), Le Wang (JiNan Vocational College, China), Wenjuan Xing (Qilu Normal University, China), and Zheng Wang (Qilu Normal University, China)</i>	
Analysis on the Influencing Factors of Medical Seeking Behavior of the Elderly Migrantfollowing Child in China .218.....	218
<i>Xinru Xiao (Shanghai Institute of Technology, China) and Zhijun Hu (Shanghai Institute of Technology, China)</i>	
The Impact of the Policy of free Medical Services on the Population in Ambon of Indonesia .222....	222
<i>Xin Zhao (Chongqing University of Education, China), Fang Tan (Our Lady of Fatima University, Philippines), Weiwei Liu (Chongqing Medical University, China), and Qin Li (Our Lady of Fatima University, Philippines)</i>	
Research on the Supply of Materials for the Prevention and Control of the Emerging Infectious Diseases-Based on Dynamic Game Model .226.....	226
<i>Danyang Li (Shaanxi Normal University, China) and Dangchen Sui (Shaanxi Normal University, China)</i>	
Current Research on the Promotion and Prevention of Non-Communicable Diseases in Fiji .231.....	231
<i>Xin Zhao (Chongqing University of Education, China), Fang Tan (Our Lady of Fatima University, Philippines), Weiwei Liu (Chongqing Medical University, China), and Qin Li (Our Lady of Fatima University, Philippines)</i>	
Analysis of the Relationship Among College Students' Coping Strategies, Psychological Resilience, and Anxiety During COVID-19 .235.....	235
<i>Shuangshuang Cai (Jiangnan University, China) and Mengxuan Jin (Jiangnan University, China)</i>	
Evidence Based on Patient's Experience Data and Clinical Guidelines-for Patient-Oriented Clinical Decision Support .240.....	240
<i>CongQian Wu (Hubei University of Technology, China) and Liang Xiao (Hubei University of Technology, China)</i>	

Research on the Borderline Personality Disorder and Treatment .248.....
Xu Yao (Jiangsu Province Tianyi High School, China)

Network Pharmacological Analysis and Preliminary Validation of Mechanisms of Poria Cocos
(Schw.) Wolf Against Stroke .252.....
*Jing Guo (Jiangnan University, China), Peng Zeng (Huazhong University
of Science and Technology, China), Meng Fang (Jiangnan University,
China), and Han Zhao (Jiangnan University, China)*

Selection and Pretreatment of the Three-Dimensional Structure for the key Target Protein
of Hyperlipidemia .259.....
*Weiyue Tao (Guangdong Pharmaceutical University, China) and Brook Xiao
(St.Paul's School)*

GIS-Based Characteristics of Infectious Disease Transmission: A Comparison of COVID-19 and
SARS in Guangzhou, China .263.....
*Mengting Wang (Wuhan University of Science and Technology, China),
Zuohua Miao (Wuhan University of Science and Technology, China),
Zhidong Wang (Wuhan University of Science and Technology, China), and
Lijun Jin (Wuhan University of Science and Technology, China)*

Transmission Pattern and Climatic Effects as for the Hand-Foot-Mouth Disease .270.....
*Zhang Pengli (Guilin University of Electronic Technology, China), Wei
Yingzhu (Guilin University of Electronic Technology, China), and Tang
Tian (Guilin University of Electronic Technology, China)*

Author Index 277.....