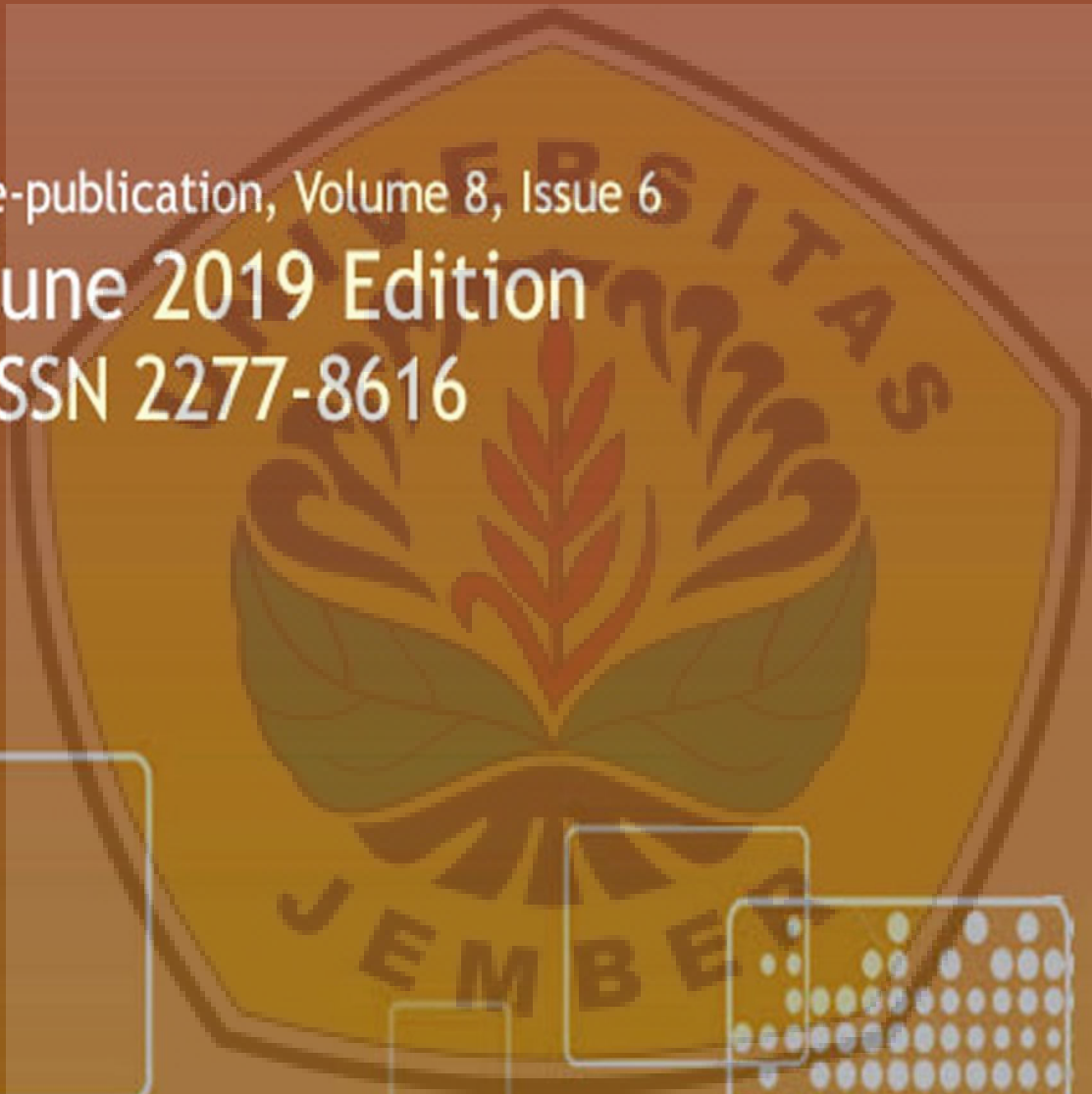


International Journal of Scientific & Technology Research

e-publication, Volume 8, Issue 6

June 2019 Edition

ISSN 2277-8616



Editorial Board – IJSTR

S.S. Gupta

Chief Editor

editor@ijstr.org

Vijayaragavan Navagar (India)	Dr. S.N. Singh (India)	Dr. P.S. Sharavanan (India)
Prof. N. Yassin (India)	Dr. V.A.JOSEPH (USA)	Prof. Sita Rama Alluri (India)
Anil Chaudhary (India)	Ashish Kumar (India)	R.B.Durairaj (India)
Prof. Rima Sabban (Sweden)	Dr. Sobhan Babu Kappala (India)	Sreenivasa Rao Basavala (India)
Dr. Abdul Hannan Shaikh (India)	Prashant Singh Yadav (India)	Fuzail Ahmad (India)
Daryoosh Hayati (Iran)	Dr. Tarig Osman Khider (Sudan)	Dhahri Amel (Tunisia)
Ajit Behera (India)	Dr. Basavarajaiah D.M. (India)	Maiyong Zhu (China)
Dr. Rafik Rajjak Shaikh (Germany)	Dr. Paras Wani (India)	Dr. Anupam Khanna (India) Head, Department of Mathematics DAV College Sadhaura, Yamunanagar Haryana India
Eliot Kosi Kumassah (Ghana)	Sonal Chonde (India)	Prof. Mohammed Junaid Siddiqui (India)
Kalyana Ramu B (India)	Dr. Jayant Makwana (India India)	Skinder Bhat (India)
Farkhunda Jabin (India)	Dr. Hayssam Traboulsi (Lebanon)	Dr. S.Sundaram sengottuvelu (India)
Chandresh Kumar Chhatlani (India)	Dr. Jayapal Maleraju (India)	Aleemuddin.MA (India)
Rajib Roychowdhury (India)	Prof. Shashikant Patil (India)	Er. Ashutosh Dhamija (India)
Rajeshwar Dass (India)	Firas Mohammad AL-Aysh (Syrian Arab Republic)	Balajee Maram (India)
Dr. Khoulood Mohamed Ibrahim Barakat (Egypt)	Prof. Pravin Hansraj Ukey (India)	Dr. Sree Karuna Murthy Kolli (India)
Dr Salvatore Parisi (Italy)	Dr. Tarun Kumar Gupta (India)	Prof. Anoop Kumar (India)
Dr. Govind Daya Singh (India)	Hardeep Singh (India)	Dr. Basharia A. A. Yousef (Sudan)

Digital Repository Universitas Jember

Dr. Rajeev Vats (India)
The University of
Dodoma, Tanzania

Fadugba S. Emmanuel (Nigeria)
Ekiti state university, Department
of mathematical sciences, PMB
5363, Ado Ekiti

Dr. Sukumar Senthikumar (India)
Post Doctoral Researcher,
Advanced Education Center of
Jeonbuk for Electronics and
Information Technology-BK21,
Center for Advanced Image and
Information Technology, Division
of Computer Science and
Engineering, Graduate School of
Electronics and Information
Engineering, Chon Buk National
University, 664-14, 1Ga, Deok Jin-
Dong, Jeonju, Chon Buk, 561-756,
South Korea.

Dr. Mohammed Viqaruddin
(India)
Assistant Professor in Political
Science, Deogiri College,
Aurangabad

Shadab Adam Pattekari (India)
Ph.D, MTech [CSE], B.E I.T
ASSISTANT PROFESOR IN CSE
DEPT. Tatyasaheb Kore Institute
Of Engineering & Technology

Dr. Laith Ahmed Najam (Iraq)
B.Sc. Physics (1987), M.Sc. in
Nuclear Physics (1990), Ph.D. in
Nuclear Physics (2006) Mosul
Univ.-IRAQ

Dr. Fouad A Majeed (Iraq)
Dept. of Physics College of
Education for Pure Sciences
University of Babylon

Dr. Ajay Gupta (India)
M.Sc., Ph.D, NET (CSIR) NET-
ARS (A.S.R.B)

Dr Anupam Krishna (India)
Asst. Prof., in Manipal University,
TAPMI school of Business, Jaipur

Ms. Siva Priya R (India)
Assistant Lecturer College of
Allied Health Sciences, GMU

Prof. Rahul Mukherjee (India)
H.O.D.(EC-Dept.) SAIT, Jabalpur

M.A. Andrzej Klimczuk (Poland)
Warsaw School of Economics,
Collegium of Socio-Economics
Ph.D. candidate

Dr. Faizan Zaffar Kashoo (India)
Lecturer, College Applied Medical
Sciences, Department Of Physical
Therapy and Health Rehabilitation,
Al-Majma'ah University Kingdom
Of Saudi Arabia.

Bambang Eka Purnama
(Indonesia)

Dr. Haijian Shi (USA)
Ph.D., P.E. 300 Lakeside Drive,
Ste 220
Oakland, CA 94612

Dr. Mohammad Israr (India)
Principal - Balaji Engineering
College, Junagadh Gujarat-362014

Kamal Kant Hiran (Ghana)
Ph.D*, M.Tech. Gold Medalist,
B.E

Dhananjai Verma (India)
Geologist - Geological Survey of
India, Gandhinagar, Gujarat

Prof. Lalchand Dalal (India)
Associate Professor in Botany.

Rajesh Duvvuru (India)
Assistant Professor,

Mallikarjun C.Sarsamba (India)
M. Tech. in Power Electronics,

Digital Repository Universitas Jember

M.Sc.(Bot), M.Phil(Bot), Ph.D(Botany. Title-Biofertilizers- Macronutrients and Micronutrients).	Dept. of C.S.E, National Institute Of Technology, Jamshedpur	BE in Electronics & Communication
S Nagakishore Bhavanam (India) Assistant Professor, University College of Engineering & Technology, Acharya Nagarjuna University,	Dr. Fateh Mebarek-Oudina (Algeria) Assoc. Prof at Skikda University	Dr. kulkarni Sunil Jayant (India) Asst. Professor Datta Meghe College of Engg., Airoli, Navi Mumbai
Nazim Nariman (Iraq) Consultant Structural Engineer PhD in Computational Structural Mechanics/Bauhaus Universitat Weimar/Germany MSc in Structural Engineering/ University Sains Malaysia/ Malaysia BSc in Civil Engineering / Salahaddin University / Iraq	Indra Narayan Shrestha (Nepal) Project Manager, Energize Nepal, School of Engineering, Kathmandu University (KU), Nepal	Dr. Meenu Pandey (India) Associate Professor (Communication Skills) Lakshmi Narain College of Technology, Bhopal
Govinda Bhandari (Nepal) Chief, Research and Training Environment Professionals Training and Research Institute (EPTRI), Pvt. Ltd., Nepal	Meenakshi Priyadarshni (India) INSPIRE FELLOWSHIP Department of Science and Technology (Government of India)	Kalipindi Murali (India) K.Murali M.Tech.,M.Sc.,IAENG Asst Professor and Incharge HOD ept of ECE VITW
Prof. Piyush Kumar Pareek (India) B.E,M.Tech,MISTE,(Ph.D)	Dr. R. SathishKumar (India) Associate Professor - Electronics and Communication Engineering, Sri Venkateswara College of Engineering	Dr. N R Birasal (India) Associate Professor, Zoology Department, KLE Society's G H College
Dr. Hiren C. Mandalia (India) Scientist In-charge (HOD) at Central Laboratory, Ahmedabad Municipal Corporation (AMC)	Dr. Chandrashekhar Joshi (India) Ph.D. (Management), M. Phil, (1st class) , M.Com.(1st class)	M. Vasim Babu (India) M.Vasim Babu M.E(Ph.D) AP/ECE,LMEC
Dr. YariFard Rasool (China) Rasool YariFard, PhD. in Accounting, Wuhan University of Technology, Wuhan, China.	Dr. V. Balaji (India)	Dr. Sridevi T.R. (India) Ideal Homes layout R R Nagar, Bangalore South, India
Prof. L Ramanan (India)	Dr. Malik Muhammad Akhtar	G. Komarasamy (India)

Digital Repository Universitas Jember

Consultancy Services Founder & CEO Bangalore-India	(Pakistan) China University of Geosciences, Wuhan 388 Lumo Lu, Wuhan 430074, Hubei Province, China PRC	G.Komarasamy., M.E.(Ph.D)., Assistant Professor-Senior Grade, Department of Computer Science & Engineering, Bannari Amman Institute of Technology, Sathyamangalam.
Syedardalan ASHRAFZADEH (New Zealand) Biotech. PhD Candidate School of Biological Sciences University of Canterbury, New Zealand	J. Deny (India) M.Tech in Digital Communication and Network Engineering in Kalasalingam University, Krishnankoil	Kavin Rajagopal (India) ASSISTANT PROFESSOR (EEE DEPT) EXCEL COLLEGE OF ENGINEERING & TECHNOLOGY KOMARAPALAYAM
R. Ranjithkumar (India) M.Sc.,(Ph.D), Research Scholar, Department of Biotechnology, Dr.N.G.P. Arts and Science College, Coimbatore-48, Tamilnadu	Dr. Abdul Aziz Khan (India) Director/Principal, Rajeev Gandhi Proudyogiki Mahavidyalaya	Sakshee Gupta (India) PhD (Medical Microbiology): From Deptt. Of Microbiology, SMS Medical college, Jaipur
Kundan Lal Verma (India) Asst. BDM, Professional Imaging Inc., New Delhi; Founder, Ujjawal Research Group; Member, NASA MATB Researchers Group.	Y. Ravindra Reddy (India) Associate Professor, Teegala Ram Reddy College of Pharmacy, Meerpet, Saroornagar, Hyderabad.	Dr. Mahyar Taghizadeh Nouie (Iran) Doctor of Philosophy, Applied Mathematics (Optimal Control and Optimization), Ferdowsi University of Mashhad, Iran
Dr. C. Jaya Subba Reddy (India) Senior Assistant Professor, Dept. of Mathematics, S. V. University, Tirupati-517502, Andhra Pradesh, India	Ameenulla J Ali (India) PhD in Wireless Communications (Electrical & Electronics Engineering) (Expected Dec-2015) Queen's University of Belfast, United Kingdom	Dr Palanivel Sathishkumar (Malaysia) M.Sc., M.Phil., Ph.D., Researcher: Institute of Environmental and Water Resource Management, Universiti Teknologi Malaysia, Johor Bahru, Malaysia
Kajal V. Rupapara (India) Junior Research Fellow: Main Dry Farming Research Station, Junagadh Agriculture University, Targhadia, Rajkot.	Ryhanul Ebad (KSA) (1). Lecturer, Department of Computer & Information, Jazan University, Jazan, KSA. (2). Consultant and Advisor, Vice President for Academic Affairs, Jazan University, Jazan, KSA	Dr. Shuchitangshu Chatterjee (India) Dy. General Manager - I/c (R&D), R & D Division, MECON Ltd.
Mohammad Sadegh Mirzaei (Iran)	Dr. Ashish Kr. Luhach (India)	Mr. G. Aswan Kumar (India)

Digital Repository Universitas Jember

Asst Prof. University of Applied Science and Technology, Fars, Iran
Associate Professor at Lovely Professional University, Jalandhar, Punjab. India
B.E., M.Tech., MIEEE., MASEE, Dept. of Electronics & Communication Engineering, Baba Institute of Technology and Sciences, Visakhapatnam-48, Andhra Pradesh, India

Dr. Rey S. Guevarra (Muntinlupa) Professional Diploma leading to Doctor of Philosophy in Mathematics Education; Centro Escolar University
Dr. K.V.V.N.S. Sundari Kameswari (India) Assistant Professor with IMS Engineering College, Ghaziabad, UP
Dr. Aakash Shah (India) Junior Resident (Orthodontics) Department of Orthodontics and Dentofacial Orthopedics, K.M. Shah Dental College and Hospital, Vadodara, Gujarat, India

Naveen Mani Tripathi (India) Research Scientist in Ben-Gurion University of The Negev, Israel
Shatrunjai Pratap Singh (USA) Senior Data Scientist Consultant, Advanced Analytics, John Hancock Insurance, Boston, MA
Egbuna Chukwuebuka (Nigeria) Quality Control Analyst; New Divine Favour Pharmaceutical Industry Limited, Akuzor, Nkpor, Anambra State

M. Selvaganapathy (India) Assistant Professor in CK COLLEGE OF ENGINEERING & TECHNOLOGY, CUDDALORE
Dr. S.R.Boselin Prabhu (India) VSB College of Engineering Technical Campus, Coimbatore
Dr. Sonam Mittal (India) Associate Professor in the Dept of Computer Science & Information Technology in BK Birla Institute of Engineering & Technology, Pilani

Dr. Nikunj Patel (India) Assistant Professor in Microbiology, Sankalchand Patel University, Visnagar, Gujarat
Rishmita Mukherjee (India) Technical Knowledge exchange workshop: "Vulnerability of Sundarban in changing Climate",
G. Jegadeeswari (India) Assistant Professor in the Department of EEE, AMET Deemed to be University, Chennai

Smart Air Conditioning Nabil Ahmad Moussa	1-6
Relationship Marketing, Service Quality, Satisfaction And Customers Loyalty Of Bank Sharia Mandiri Banyuwangi Dwi Ratnasari, Tatang Ary Gumanti	7-10
Viscosity Of Aqueous Solutions Of N-Methyldiethanolamine + Monoethanolamine (MDEA+MEA) Udara. S. P. R. Arachchige	11-15
Conservatism Under IFRS In Indonesia Ermina Sari, Susi Sarumpaet	16-21
The Study Of Corporate Social Responsibility In Emerging Economies: The Case Of SME's, Tourism, Environment Upgrade Programs In Indonesia Tirta Nugraha Mursitama, Noerlina, Nilam Budi Wulandari	22-24
Gender Differences, Mathematics Anxiety, And First-Year College Students' Mathematical Achievement Ellenita G. Manalaysay	25-29
Coaxial Antenna Slot Impact On Thermal Effectiveness In Microwave Ablation Therapy Olumide A. Towoju, Felix A. Ishola, Timilehin Sanni, Rita Soji-Adekunle	30-36
Modelling Organisations As Electronic Institutions Gideon Dadik Bibu	37-43
Mobile Based Android Application Pharmaceutical Dictionary With Direct Search As Searching Process Akbar Iskandar, Markus Dwiyanto Tobi Sogen, Jacky Chin, Erwinsyah Satria, Rohman Dijaya	44-46
Ethnomathematics: Exploration Of The Muntuk Community Maryati, Rully Charitas Indra Prahmana	47-49
Boric Acid And Hazard Analysis Critical Control Point (HACCP) On Kerupuk To Improve The Indonesian'S Traditional Foods Safety Anita Dewi Moelyaningrum	50-54
Impact Of Employee Internal And External Factors On Performance, Moderated By Online Application Deden Tarmidi, Regina Jansen Arsjah	55-61

<p>Adaptation Of AVEM (Arbeitsbezogenes Verhalten-Und Erlebensmuster) Test To Measure Work-Related Behavior And Experience Patterns Hazhira Qudsyi, Fitri Ayu Kusumaningrum, Dian Sari Utami, Arief Fahmi, Nyda Afsari, Mirza Muchammad Iqbal, Marcus Stueck</p>	32-39
<p>Interactive Online And Offline Games: Their Influence To The Mathematical Aptitude Of Secondary School Learners Marchie V. Penaso, Derren N. Gaylo</p>	70-77
<p>Public Servants Characteristics And Their Perception On Motivation And Performance A.T. Hendrawijaya, N. Imsiyah, D.T. Indrianti</p>	78-81
<p>The Effect Of Minimum Wage On Employment, Economic Growth And Social Welfare In The Ex Besuki Residency Of East Java-Indonesia Sunarsih, Mohammad Saleh, Syamsul Huda, I Wayan Subagiarta</p>	82-89
<p>Effects Of Local Wisdom In The Form Of Planting Prayer In The Regional Development On Rice Paddy Farmers Revenue In Indonesia Hasman Hasyim, Iskandar Muda</p>	90-98
<p>It's True The Effectiveness Of The Fertilizer Subsidy Policy And Its Effects On The Income Of The Farmers ? (Case In Indonesia) Rahmanta, Andri Prasetyo, Iskandar Muda</p>	99-102
<p>Development Of Embroidery Motif Designs Using The Principle Theory Of Gestalt Dwi Cahyadi, Etwin Fibriane Suprpto, Andi Farid Hidayanto</p>	103-106
<p>The Competency Of Agriculture Extension Supervisor Based On Farmer's Perspectives Is Eka Herawati, Adhi Susilo</p>	107-113
<p>Canteen Service Quality And Student Satisfaction Norman R. Galabo, EdD, FRIEdr</p>	114-126
<p>Metric Chromatic Number Of Unicyclic Graphs R. Alfarisi, A.I. Kristiana, E.R.Albirri, R. Adawiyah, Dafik</p>	127-130
<p>Expert System Design As A Quality Control Efforts In The Packaging Process Tea Rgb 220 Ml Package Bottle In Pt. Sinar Sosro Kpb Deli Serdang Isra Mouludi, Kasman Rukun, Nurhasan Syah, Seprina Hafridana, Maria Isfus Senjawati, B.Herawan Hayadi</p>	131-133
<p>Feasibility Analysis For Local Industry Of Gonggong Crackers In Batam M. Ansyar Bora, Jalius Jama, syahril, Albertus Laurensius Setyabudhi, Ari Susanti</p>	134-136
<p>Development Of Batik Toba Gorga Simeol-Meol Of Design On Photoshop Netty Juliana, Selamat Triono, Fahmi Rizal, B.Herawan Hayadi</p>	137-140

Public Servants Characteristics And Their Perception On Motivation And Performance

A.T. Hendrawijaya, N. Imsiyah, D.T. Indrianti

Abstract: Motivation has always been argued to be the essential factor in the management of personnel. It is also known as a crucial variable in producing a high performance of an organization. The relationship between motivation and performance has been widely examined in previous studies. However, it seems that motivation has become one of the big questions in government organization, in particular among developing countries. Thus, understanding how employees in the public sector assess the motivation and performance is interesting. This study aims to examine the influence of two employees' characteristics on their perception of motivation and performance. It examines a sample of 96 employees assigned specifically to deal with the prevention of Dengue Fever in Jember District Health Office, East Java Province, Indonesia. A univariate test is performed to test the hypotheses. Results show that age and gender are not related to both the work motivation and performance of employees.

Index Terms: age, gender, motivation, performance, public sector organization.

1 INTRODUCTION

Dengue Hemorrhagic Fever (DHF) is one of the endemic diseases in Jember District. From year to year, the number of patients tends to increase. Data from the Health Office of Jember District show that by the end of 2015, there were 905 people with DHF. Efforts to overcome DHF in Jember District have been carried out through the formal regulation, namely Jember District Regulation no. 188.45/222/012/2015. The regulation is mandated to tackle for DHF endemic. However, it seemed that the disease is still not anticipated well. One of the causes could be because of inadequate human resources (Health Office of Jember District). Efforts to prevent and overcome DHF often experience obstacles, both internal (employees) and external obstacles (social environment). The number of field officers assigned specifically to the prevention of DHF is not proportional to the size of the area. This is very influential on the performance of overall employees. As a result, the number of DHF patients reaches nearly 1,000 people by the end of 2016. DHF oversight officers should take serious care of employees primarily in densely populated areas. Employees are components of human resources that play an important role in improving the implementation of tasks within the framework of achieving goals. Employees have a share in the organizational success. Employees should possess building and active attitudes such as high responsiveness, initiative and creativity, and adaptable sensitivity that can all be used as a means to increase employee productivity. One of the success factors of government programs is the quality of employees. In this respect, the level of employee involvement in the program is playing a crucial role [1]. This means that factors inherent in the employees greatly affect their motivation and performance. One factor of the employees that affects her performance is

age. Age is the length of one's life in the year counted from birth. Age is also a determinant of individual performance. Individual performance will gradually increase or decrease with age depending on their work [2]. In addition to age, another factor of employees that is important in organizational success is gender. Gender may affect the performance of employees. It has been observed with respect to physical and psychological differences among them. However, sex differences do not matter regarding performance measurement of employees [3]. Nowadays, men and women have been treated equally almost in all areas of life [4]. They are competing for the same job positions. In the current era, all individuals are having and given equal opportunity to work in any type of organization. It is therefore, necessary to examine whether all sexes can work and compete equally, regardless of age or gender differences. Some studies have found that age affects the learning process because early revelation to language instruction remains to produce better performance and results show that learning English at an early age is important [5]. The sales performance is not determined by the age of business actors [6]. One study shows that sales person, either young or old, can play a significant role in defining the success of a business. For example, [7] report that the higher the business owner, the better is the performance. Business owners aged over 40 years had the opportunity to produce more than those aged less than 40 years [8]. Given the importance role of gender and age in the performance of the organization, this study aims to examine the influence of age and gender on employee motivation and on employee performance. The focus of examination if on the perception of field work officers of the local government of Jember District assigned specifically for prevention of DHF. Many previous studies are focused on employees of a private entity (organization), very few are directed to the public servants. So, this study fills the gap of examining the issue of possible differential perception on performance and motivation among government employees. Using a sample of 96 field officers assigned specifically for DHF prevention, the study finds that the employees' perception of motivation and performance are not affected by their gender and age. This means that the perception of employees on motivation and performance is independent of their sex type and age. The remainder of the paper is organized as follows. Next section presents the literature review and the development of hypotheses. Section three provides the research method followed by the presentation of results and discussion. The

- A.T. Hendrawijaya, is Senior Lecturer at the Faculty of Teacher Training and Education Universitas Jember, Indonesia, Phn. +62-331-330738. E-mail: ath.wijaya@gmail.com
- N. Imsiyah is Senior Lecturer at the Faculty of Teacher Training and Education Universitas Jember, Indonesia E-mail: niswatul@unej.ac.id
- D.T. Indriant is Lecturer at the Faculty of Teacher Training and Education Universitas Jember, Indonesia E-mail: nindrianti_pkp@yahoo.co.id

final section concludes the paper.

2 LITERATURE REVIEW AND HYPOTHESES

2.1 Literature Review

Generally, older people are believed to have lower power than younger people in performing certain tasks. Age is among the factor that affects decreasing performance [9]. To a certain extent, physically the elderly is not as strong as the younger. Some important differences between old and young people are psychological aspects. On certain assignments, old people may perform better than younger ones because of experience factors, such as they can give better advice than younger ones. The pattern of age change in work performance varies according to the job characteristics. If the job demands the employees for rapid reaction or weighty physical work, then age could be a disadvantage even in their thirties. However, if employees' performance could be improved by experience or expertise of work-related tasks, then age could become an advantage over an extended period of work [2]. Several studies have shown that performance decline begins earlier in heavy physical work than in mental jobs [10] and [11]. Men and women today are much more alike than many decades ago [3]. This is because men and women are hard to be treated equally in all life aspects and society does not differentiate between the two sexes. Modern people have removed the frontiers between the lifestyle of both. In this respect, [4] differentiates between traditions (i.e., women with traditional values, adhering to the role of stereotypical women's work) and modern people (i.e., later generations of women who are more similar to, rather than different from their male counterparts). There are striking differences in both physically and psychologically between men and women. This difference can lead to a different way for men and women in gathering on their jobs such as the average women cannot work at a similar level of efficiency as men. Research shows that psychologically men and women are different [12]. The performance of employee organizations depends on their emotional intelligence [12]. There were prominent differences between male and female workers [13]. There is no difference between male and female productivity [14]. Other studies have found that sex differences (masculinity or femininity of a person) are due to differences in social experience [15] and gender also does not fully determine one's role [16]. The motivation of work occurs in the situation and work environment that exist in an organization. Success and failure are often associated with employee work motivation. Humans always want things that are okay, so the driving force or motivator that motivates morale depends on the hope that will be obtained when the hope comes true then someone will tend to increase their motivation. According to [17], motivation is a process influencing individual choices on the various forms of desired activity. Performance means something that is the result of concrete, observable, and measurable work. Performance as the achievement of objectives that have been set is one of the benchmarks of individual performance [18]. There are three criteria in performing an individual's performance assessment, namely individual tasks, behavior, and characteristics. Organizational performance can be measured using the time dimension approach, i.e., short, medium, and long-term stage [19]. The whole process of that stage is an indivisible system, even a short period is a prerequisite for entering a medium-term period, and thus the

medium-term period is a prerequisite for entering the long-term phase. Ultimately organizations that do not perform well in short-term periods cannot survive for the future. Several studies of employee performance have been conducted, previous studies have shown different results and are still a debate among academic practitioners. The factors that affect employee performance could be in terms of education and training, discipline, attitudes and work activities, and morale [20]. Job satisfaction also affects performance [21]. Other studies have found that commitment is a factor that can affect employee performance [22] and [23].

2.2 Hypotheses

Age is closely related to the level of maturity of employees. Maturity is the level of technical ability in performing tasks and psychological maturity. A more advanced one's age also increases one's maturity, as well as psychological, will show the maturity of the soul. If research separates professionals and nonprofessionals, it will be found that performance levels tend to increase in professionals with age, whereas in nonprofessional performance declines with age [18]. Age is also a determinant of individual performance, i.e., individual performance will gradually increase or decrease with age depending on their work [2]. Business owners over 40 years old had an opportunity to earn more than those who were less than 40 years old [8]. There is no significant difference between sales performance and demographic characteristics of business actors such as age [6]. Based on the above description, the proposed hypotheses are:

H₁: There are differences in employee work motivation based on their age

H₂: There are differences in employee work performance based on their age

Gender is commonly used to distinguish one's sex, i.e., male or female. Psychological studies have found that men are more aggressive and more likely to have hope for success, so men perform better than women [18]. Most of the stereotyped differences that are often used to describe men and women in organizations are invalid [24]. Some studies have found no difference regarding the performance between men and women in the medical student exam [25]. Meanwhile, another study documents that female students outperformed male ones in both clinical evaluation and written examination [26]. There are differences in performance between male and female in managing companies [27]. There is no significant difference between sales and sex performance of business actors [6]. Based on the above description, the proposed hypotheses are:

H₃: There are differences in employee work motivation based on their gender

H₄: There are differences in employee work performance based on their gender.

3 RESEARCH METHODS

The focus of this research is to examine whether the perception of employees on motivation and performance is different when viewed from their characteristics (age and sex). The populations of this research are all field officers in the prevention of Dengue fever in Jember District Health Office of which there are 110 officers. They are all given the questionnaires to fill in. A total of 96 usable questionnaires are examined. A 5 point Likert scale adapted from the literature

associated with the study is used to gain the responses from the respondents. The age is distinguished in two groups, below 40 and above 40. The respondent's gender is based on their sexes, i.e., male and female. The measurement of work motivation variables adopts the questionnaire developed by [28], [18], and [29]. There are 25 indicators for the motivation variable. Measurement of performance variables follows [30], [31], and [32]. There are 15 indicators for the performance variable.

4 RESEARCH AND DISCUSSION

The respondents' data include gender, age, latest education and years of service. The description of each characteristic shows that most of the respondents are male (66.7%) or 64 people, most of the respondents are aged below 40 years old (73.95%). Most of the respondent have last education of high school (78.1%) and have a working period of 19 to 24 years (62.5%). To test the hypotheses, the study uses the t-test for mean difference. The results of independent sample t-tests based on the age of respondents are presented in Table 1. As can be seen in Table 1, there is no difference in the perception of employees when they are divided into their age difference either based on the motivation or performance. This means that the age of the employees does not make them view that motivation and performance is different. In other words, there is no different regarding employees' perception in either their motivation to work or the performance of their work. They share the common values on motivation and performance. On average, older employees value motivation (Columns 2 and 3) and performance (Columns 4 and 5) slightly higher than their younger counterparts. Thus, we fail to accept the first and third hypotheses that the gender of employees as the factor that determines the perception of employees on motivation and performance.

TABLE 1.
RESULTS OF T-TEST INDEPENDENT SAMPLES BASED ON AGE OF RESPONDENTS

Description	Motivation		Performance	
	Younger (71)	Older (25)	Younger (71)	Older (25)
Mean	3.611	3.630	3.618	3.632
Mean Difference	-0.019		-0.014	
t -stat	-0.263		-0.133	
p-value (two-tail)	0.793		0.895	

Similar findings are reported when the test is performed using gender as the variable that determines whether there is a difference of employees' perception in terms of motivation and performance. Female employees value motivation and performance higher than their male counterparts. Yet, given there is no statistically significant finding, we are unable to conclude that gender of employees as the determinant for the extent of work motivation as well as work performance. The finding reported here is qualitatively similar to [6] who find that there is no significant difference between gender and sales performance of business actors. In conclusion, we are unable to accept the second and fourth hypotheses that the age of employees is as the determinant for the motivation and perception of employees.

TABLE 2.
RESULTS OF T-TEST INDEPENDENT SAMPLES BASED ON GENDER OF RESPONDENTS

Description	Motivation		Performance	
	Male (64)	Female (32)	Male (64)	Female (32)
Mean	3.567	3.733	3.578	3.694
Mean Difference	-0.166		-0.116	
t -stat	-1.535		-1.205	
p-value (two-tail)	0.130		0.234	

The findings reported here is worth noted given that previous studies have also documented no significant differences regarding the employees' performance values. For example, there is no difference between men and women in performance in the medical student exam [25]. Interestingly, another study documents that female students outperformed men in both clinical evaluation and written examination [26]. Inmyxai and Takahashi [27] examine and compare the performance of companies led by men or women and find that the performance of male leaders is different compared to female leaders.

5 CONCLUSION

This study examines whether gender and age of employees as the factors that determine their perception of work motivation and work performance. The study examines 96 employees of local government in Jember district assigned specifically for preventing Dengue Hemorrhagic Fever (DHF). The results suggest that the perception of employees both on motivation and performance is not determined by their age and gender. In other words, age and gender are not the determinants for differentiating the employees in valuing work motivation and work performance. We note that our findings may be affected by the characteristics inherent on the public sector employees, i.e., government officers, that they are less motivated to expand their performance as they have been in a comfort zone. So, when we refer to the motivation and performance evaluation, they seem to be less attracted. We suggest that future study may be directed to examine the same issue by using employees in the private sectors. Future study may look at more specific differentiation of age group, as the current study only divide the age on to two groups. We suspect that our finding is should be more sensitive when the group is not two, but three or four, or even we might use above 50 and below 30 group.

ACKNOWLEDGMENT

The authors wish to thank Prof. Gumanti for his helpful comments on the earlier draft of the paper.

REFERENCES

- [1] B.J. Caldwell, and J.M. Spinks, "Leading the Self Managing School", London: The Falmer Press. 1992.
- [2] P. Warr, "Age and job performance". In Snel, J., & Cremer, R. R. (Eds.), Work and Aging: A European Perspective. London: Taylor & Francis, pp. 309-322, 1994.
- [3] M.S. Kimmel, "The Gendered Society", Oxford: Oxford University Press, 2000.
- [4] D.P. Moore, "An examination of present research on the female entrepreneur-suggested research strategies for the

- 1990's", *Journal of Business Ethics*, Vol. 9, no. 4-5, pp. 275-281, 1990.
- [5] E.M.K. Gawi, "The effects of age factor on learning English: A case study of learning English in Saudi Schools, Saudi Arabia", *English Language Teaching*, vol. 5, no. 1, pp. 127-139, 2012.
- [6] F. Salleh, N., Yaakub, M. Mohamad and W.K.W. Sulong. Demographic Characteristics Differences and Sales Performance among Night Market Traders in Malaysia. *International Business Research*, vol. 5, no. 4, pp. 25-33, 2012.
- [7] R. Heck, B. Rowe, and A. Owen, "Home Based Employment and Family Life", Westport: Connecticut: Auburn House, 1995.
- [8] B. Orser, and M. Foster, "Home Enterprise: Canadians and Home Based Work. Canada: The Home Based Business Project Committee, 1992.
- [9] A. Gelderblom, "In ageing and employment: Identification of good practice to increase job opportunities and maintain older workers in employment", *The Relationship of Age with Productivity and Wages*, European Commission, pp. 67-84, 2000.
- [10] J. Ilmarinen, "Ageing Workers in the European Union Status and Promotion of Work Ability. Employability and Employment", Helsinki: Finnish Institute of Occupational Health, 1999.
- [11] C. Capanni, S. Sartori, G. Carpentiero, and G. Costa, "Work ability index in a cohort of railway construction workers". *International Congress. Series 1280*, pp. 253-257, 2005.
- [12] D. Goleman, "Emotional Intelligence". New York: Bantam, 1995.
- [13] C.G. Brush, "Research on women business owners: past trends: A new perspective and future directions", *Entrepreneurship: Theory and Practice*, vol. 16, no. 4, pp. 5-30, 1992.
- [14] H.J. Ahl, "The making of the female entrepreneur: A discourse analysis of research texts on women's entrepreneurship", *JIBS Dissertation Series 015*. Jönköping University, 2002.
- [15] K. Korabik, "Sex and gender in the new millennium", In G.N Powell (ed.), *Handbook of Gender and Work*. Thousand Oaks, CA: Sage Publications, pp. 3-16, 1999.
- [16] E.M. Fischer, A.R. Reuber, and L.S. Dyke, "A theoretical overview and extension of research on sex, gender and entrepreneurship", *Journal of Business*, vol. 8, no. 2, 151-168, 1993.
- [17] V.H. Vroom, "Work and Motivation", San Francisco: Jossey-Bass Publishers, 1995.
- [18] S.P. Robbins, and T.A. Judge, "Organizational Behavior", (17th ed.), Global Edition, Harlow, England: Pearson Education, 2017.
- [19] J.L. Gibson, J.M. Ivancevich, J.H. Donnelly Jr, and R. Konopaske, "Organization: Behavior, Structure, Processes", (14th Ed.). New York: McGraw-Hill, 2009.
- [20] J. Ravianto, *Manajemen Produksi*, Jakarta: LSIUP, 1988.
- [21] P. McClifford, and A.G. Gerasmus, "The relationship between job satisfaction and performance the case of Local Government Finance of in Ohio", *Public Productivity and Management Review*, vol. 21, np. 2, pp. 170-191, 1997.
- [22] M.N. Khuong, and V.H. Yen, "Investigate the effects of job stress on employee job performance: A case study at Dong Xuyen Industrial Zone, Vietnam", *International Journal of Trade, Economics and Finance*, vol. 7, no. 2, pp. 31-37, 2016.
- [23] M.S. Dinc, and V. Plakalovic, "Impact of caring climate, job satisfaction, and affective commitment on employees' performance in the banking sector of Bosnia and Herzegovina", *Eurasian Journal of Business and Economics*, vol. 9, no. 18, pp. 1-16, 2016.
- [24] J.M. Ivancevich, R. Konopaske, and M.T. Matteson, "Organizational Behavior and Management", (10th ed.), New York: McGraw-Hill Irwin, 2014.
- [25] F.F. Holmes, G.E. Holmes, and R. Hassanein, "Performance of male and female medical students in a medicine clerkship", *Journal of the American Medical Association*, vol. 239, no. 1, pp. 2259-2262, 1978.
- [26] W.C. Plauché, and J.M. Miller Jr, "Performances of Female Medical Students in an Obstetrics and Gynecology Clerkship" *Journal of Medical Education*, vol. 61, no. 1, pp. 323-325, 1986.
- [27] S. Inmyxai, and Y. Takahashi, The effect of firm resources on business performance of male and female-headed firms in the case of Lao micro, small, and medium-sized enterprises. *International Journal of Business and Information*, vol. 5, no. 1, pp. 63-90, 2010.
- [28] G.D. Borich, "Effective Teaching Methods Research Based Practice", New Jersey: Pearson Education, Inc., 2007.
- [29] J. Meyer, "EQ dan Kesuksesan Kerja", <http://www.e-psikologi.com>. 2004. Accessed on 12 December 2018.
- [30] D. Osborn, and T. Gaebler, "Reinventing Government: How the Entrepreneurial Spirit is Transforming the Public Sector", New York: Addison-Wesley, 1992.
- [31] P. Micheli, and A. Neely, "Performance measurement in the public sector in England: Searching the golden thread", *Public Administration Review*, vol. 70, no. 4, pp. 591-600, 2010.
- [32] K. Jankingthong, and S. Rurkkhum, "Factors affecting employ performance: A review of literature" *Silpakorn University Journal of Social Sciences, Humanities, and Arts*, vol. 12, no. 2, pp. 115-127, 2013.