

IJEEP

INTERNATIONAL JOURNAL OF
ENERGY ECONOMICS AND POLICY

EJ EconJournals

ISSN: 2146-4553

International Journal of Energy Economics and...

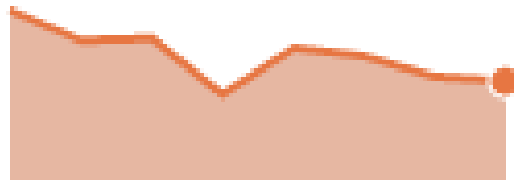
Q2

Economics,
Econometrics and
Finance...

best quartile

SJR 2019

0.37



powered by scimagojr.com

International Journal of Energy Economics and Policy (IJEEP) is the international academic journal, and is a double-blind, peer-reviewed academic journal publishing high quality conceptual and measure development articles in the areas of energy economics, energy policy and related disciplines. ISSN: 2146-4553

Ranking: 2019 SJR (SCImago Journal Rank) Score: 0.371 | 22/63 Energy: General Energy (Scopus®), CiteScore 2019: 2.8

EDITORIAL TEAM EDITORS

1. [Ilhan Ozturk](#), Editor-in-Chief, Cag University, Mersin, Turkey
2. [Ali ACARAVCI](#), Co-Editor, Mustafa Kemal University, Hatay, Turkey

SECTION EDITORS

1. [Serkan Yılmaz KANDIR](#), Co-Editor, Çukurova University, Adana, Turkey
2. [Muhittin KAPLAN](#), Istanbul University, Istanbul, Turkey
3. [Alper ASLAN](#), Nevsehir Hacı Bektas Veli University, Nevsehir, Turkey
4. [Seyfettin ARTAN](#), Karadeniz Technical University, Trabzon, Turkey
5. [Gazi Salah UDDIN](#), Linköping University, Sweden
6. [Constantinos ALEXIOU](#), Cranfield University, Bedfordshire, United Kingdom

- 7 [Abdulnasser Hatemi-J](#), UAE University, United Arab Emirates
- 8 [Hooi Hooi Lean](#), Universiti Sains Malaysia, Penang, Malaysia
- 9 [Muhammad Shahbaz](#), School of Management and Economics, Beijing Institute of Technology, China
- 10 [Cem SAATCIOGLU](#), Istanbul University, Istanbul, Turkey
- 11 [Faik BILGILI](#), Erciyes University, Kayseri, Turkey
- 12 [Abu N.M. WAHID](#), Tennessee State University, United States
- 13 [Chor Foon TANG](#), Universiti Sains Malaysia, Penang, Malaysia
- 14 [Yunke YU](#), Louisiana State University, Louisiana, United States
- 15 [Yu Hsing](#), Southeastern Louisiana University, United States
- 16 [Yue-Jun ZHANG](#), Business School of Hunan University, China
- 17 [Aviral Kumar Tiwari](#), ICFAI University Tripura, India
- 18 [Nicholas Apergis](#), University of Derby, United Kingdom
- 19 [Mohamed El Hedi Arouri](#), EDHEC Business School, France
- 20 [Ali AHMED](#), Linköping University, Linköping, Sweden
- 21 [Usama Al-mulali](#), Multimedia University, Melaka, Malaysia
- 22 [Mohammad SALAHUDDIN](#), Trent University (Canada) & University of Southern Queensland, Australia
- 23 [Abdul JALIL](#), Quaid-i-Azam University, Pakistan
- 24 [Diana Mihaela Pociovalisteanu](#), “Constantin Brancusi” University of Targu-Jiu, Romania
- 25 [Vincenzo Bianco](#), University of Genoa, Italy
- 26 [Mita Bhattacharya](#), Monash University, Australia
- 27 [Sayed Ehsan Hosseini](#), Arkansas Tech University, United States
- 28 [Burcu Ozcan](#), Firat University, Elazig, Turkey
- 29 [Rabindra Nepal](#), University of Wollongong, Australia
- 30 [Mohammad H. Ahmadi](#), Shahrood University of Technology, Iran, Islamic Republic of
- 31 [Roula Inglesi-Lotz](#), University of Pretoria, South Africa
- 32 [Songül Kakilli ACARAVCI](#), Mustafa Kemal University, Hatay, Turkey
- 33 [Victor M.F. Moutinho](#), Universidade de Aveiro, Portugal
- 34 [Samuel Asumadu Sarkodie](#), Nord University, Business School, Norway
- 35 [Abdul Rauf](#), Nanjing University of Information Science and Technology, China
- 36 [Ardi Gunardi](#), Universitas Pasundan, Indonesia
- 37 [Qazi Muhammad Adnan Hye](#), Mohammad Ali Jinnah University, Karachi, Pakistan
- 38 [Solarin Sakiru Adebola](#), Multimedia University, Melaka, Malaysia
- 39 [Abbas Ali Chandio](#), Sichuan Agricultural University Chengdu, Chengdu, China
- 40 [Arshian Sharif](#), Universiti Utara Malaysia, Malaysia
- 41 [Hoang Phong Le](#), University of Economics Ho Chi Minh City & Ho Chi Minh City University of Law, Viet Nam
- 42 [Festus Victor Bekun](#), Istanbul Gelisim University, Turkey
- 43 [Oludele Folarin](#), University of Ibadan, Nigeria
- 44 [Festus Adedoyin](#), Bournemouth University, United Kingdom
- 45 [Adedoyin I. Lawal](#), Landmark University, Omu Aran, Nigeria
- 46 [Muddassar Sarfraz](#), Nanjing University of Information Science & Technology, Wuxi, Jiangsu, China
- 47 [Ionel Bostan](#), Ștefan cel Mare University of Suceava, Romania
- 48 [Bashar H. Malkawi](#), University of Sharjah, Sharjah, United Arab Emirates

- 4) [Andrew Adewale Alola](#), Istanbul Gelisim University, Turkey
5) [Fabio Pizzutilo](#), University of Bari "Aldo Moro", Italy
5) [Sana Ullah](#), Quaid-i-Azam University, Islamabad, Pakistan
5) [Nuno Carlos Leitão](#), Évora University, Évora, Portugal
5) [Idiano D'Adamo](#), Sapienza Università di Roma, Italy
5) [Fayyaz Ahmad](#), Lanzhou University - Lanzhou, Gansu, China

PEER REVIEW PROCESS

All manuscripts submitted to this journal must follow focus and scope, and author guidelines of this journal. The submitted manuscripts must address scientific merit or novelty appropriate to the focus and scope. The Editor-in-Chief has the right to reject articles that do not meet the theme or the Guidance for Authors requirements. All manuscripts must be free from plagiarism content. All authors are suggested to use plagiarism detection software to do the similarity checking. Editors check the plagiarism detection of articles in this journal by using iThenticate software.

The research article submitted to this journal will be peer-reviewed with double-blind review. Peer Review Statement Quality is ensured by rigorous and integrity, anonymous peer evaluation of each main paper by three independent referees. The reviewers give scientific valuable comments improving the contents of the manuscript.

The final decision of articles acceptance will be made by the Editor, on behalf of the Editorial Board according to the reviewer's comments. Publication of accepted articles including the sequence of published articles will be made by Editor-in-Chief by considering the sequence of accepted date and geographical distribution of authors as well as a thematic issue.

Review Outcomes: Utilizing feedback from the peer review process, the Editor will make a final publication decision. The review process will take approximately 4 to 12 weeks. Decisions categories include,

- **Reject:** Rejected manuscripts will not be published and authors will not have the opportunity to resubmit a revised version of the manuscript to IJEEP.
- **Resubmit for Review:** The submission needs to be re-worked, but with significant changes, may be accepted. However, It will require a second round of review.
- **Accept with Revisions:** Manuscripts receiving an accept-pending-revisions decision will be published in IJEEP under the condition that minor/major modifications are made. Revisions will be reviewed by an editor to ensure necessary updates are made prior to publication.
- **Accept:** Accepted manuscripts will be published in the current form with no further modifications required.

After reviewing, all the corresponding information is sent to the author. In one or

two weeks, the author finalizes the article and sends the final version of it to the editors' office. If after this period the article is not returned (or the editorial board is not informed about any delay) – the article is refused.

PUBLICATION FREQUENCY

The journal is published Bimonthly (6 issues per year).

OPEN ACCESS POLICY

This journal provides immediate OPEN ACCESS to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge. All articles published by IJEEP are made immediately available worldwide under an open access license. This means that everyone has free and unlimited access to the full-text of *all* articles published.

ARCHIVING

This journal utilizes the LOCKSS system to create a distributed archiving system among participating libraries and permits those libraries to create permanent archives of the journal for purposes of preservation and restoration.

[More...](#)

INDEXING/ABSTRACTING

SCOPUS (Impact factor (SJR): 0,371)

RePEc and **IDEAS** (Impact Factor: 1.003)

Cabell's Directory of Publishing Opportunities in
Economics & Finance **Australian Business Deans
Council (ABDC)'s Journals' Rating List** **DOAJ**
**Excellence in Research for
Australia (ERA) Crossref**

ProQue

st -

ABI/IN

FORM

Academi

c

Journals

Databas

e

EBSC

O

[IndexCopernicus](#)

JournalSeek Google Scholar SHERPA/RoMEO MIAR
Norwegian List

[Akademia Sosyal Bilimler İndeksi \(ASOS Index\)](#)

SOBIAD

PKP Open Archives Harvester

PUBLICATION ETHICS AND PUBLICATION MALPRACTICE

International Journal of Energy Economics and Policy (IJEEP) is committed to the academic community and the lay world in ensuring ethics in publication and quality of articles in publication.

Plagiarism is strictly forbidden and papers found to be plagiarized will be

removed or not published in the *International Journal of Energy Economics and Policy*. Thus, **all received papers are checked with "Ithenticate Plagiarism Detection Software Program" (www.ithenticate.com) for plagiarism before review process.** While signing the publication agreement the author(s) have to warrant that the article and associated materials are original and it does not infringe the copyright of anyone. Also the authors have to warrant that there was a full consensus of all the authors and it was neither submitted nor published previously. In respect of the COPE's Code of Conduct for Journal Publishers (for more information see [COPE](http://www.COPE.org)), the publication ethics of the IJEEP includes the most important ethical standards for involved parties including authors, editors and peer reviewers. Any potential or emerging conflicts of interests are to be prevented by IJEEP and - in case of deviations therefrom - to be reported directly to the editor.

Editors, authors, and reviewers, within the IJEEP, are to be fully committed to good publication practice and accept the responsibility for fulfilling the following duties and responsibilities, as set by the COPE Code of Conduct for Journal Editors. As part of the Core Practices, COPE has written guidelines on the <http://publicationethics.org/resources/guidelines>.

Section A: Publication and authorship

1. All submitted papers are subject to strict peer-review process by at least two international reviewers that are experts in the area of the particular paper.
2. Review process are blind peer review.
3. The factors that are taken into account in review are relevance, soundness, significance, originality, readability and language.
4. The possible decisions include acceptance, acceptance with revisions, or rejection.
5. If authors are encouraged to revise and resubmit a submission, there is no guarantee that the revised submission will be accepted.
6. Rejected articles will not be re-reviewed.
7. The paper acceptance is constrained by such legal requirements as shall then be in force regarding libel, copyright infringement and plagiarism.

Section B: Authors' responsibilities

1. Authors must certify that their manuscripts are their original work.
2. Authors must certify that the manuscript has not previously been published elsewhere.
3. Authors must certify that the manuscript is not currently being considered for publication elsewhere.
4. Authors must participate in the peer review process.
5. Authors are obliged to provide retractions or corrections of mistakes.
6. All Authors mentioned in the paper must have significantly contributed to the research.
7. Authors must state that all data in the paper are real and authentic.
8. Authors must notify the Editors of any conflicts of interest.

9. Authors must identify all sources used in the creation of their manuscript.
10. Authors must report any errors they discover in their published paper to the Editors.

Section C: Reviewers' responsibilities

1. Reviewers should keep all information regarding papers confidential and treat them as privileged information.
2. Reviews should be conducted objectively, with no personal criticism of the author
3. Reviewers should express their views clearly with supporting arguments
4. Reviewers should identify relevant published work that has not been cited by the authors.
5. Reviewers should also call to the Editor in Chief's attention any substantial similarity or overlap between the manuscript under consideration and any other published paper of which they have personal knowledge.
6. Reviewers should not review manuscripts in which they have conflicts of interest resulting from competitive, collaborative, or other relationships or connections with any of the authors, companies, or institutions connected to the papers.

Section D: Editors' responsibilities

1. Editors have complete responsibility and authority to reject/accept an article.
2. Editors are responsible for the contents and overall quality of the publication.
3. Editors should always consider the needs of the authors and the readers when attempting to improve the publication.
4. Editors should guarantee the quality of the papers and the integrity of the academic record.
5. Editors should publish errata pages or make corrections when needed.
6. Editors should have a clear picture of a research's funding sources.
7. Editors should base their decisions solely on the papers' importance, originality, clarity and relevance to publication's scope.
8. Editors should not reverse their decisions nor overturn the ones of previous editors without serious reason.
9. Editors should preserve the anonymity of reviewers.
10. Editors should ensure that all research material they publish conforms to internationally accepted ethical guidelines.
11. Editors should only accept a paper when reasonably certain.
12. Editors should act if they suspect misconduct, whether a paper is published or unpublished, and make all reasonable attempts to persist in obtaining a resolution to the problem.
13. Editors should not reject papers based on suspicions, they should have proof of misconduct.
14. Editors should not allow any conflicts of interest between staff, authors, reviewers and board members.

Sources:

- [ELSEVIER: Elsevier publishing ethics resource kit](#)

- [COPE: Responsible research publication: international standards for authors](#)
- [COPE: Cope's new code of conduct](#)
- [COPE: Responsible research publication: International standards for editors](#)
- [COPE: Cope short guide to ethical editing for new editors](#)
- [COPE: Cope ethical guidelines for peer reviewers](#)
- [COPE: The editorial board follows the guidelines for retracting articles issued by COPE](#)
- [COPE: Code of conduct for journal publishers](#)
- [COPE: Cope retraction guidelines](#)

VOL 10, NO 6 (2020)

TABLE OF CONTENTS

ARTICLES

Investigating the Nexus of Climate Change and Agricultural Production in Nigeria Obindah Gershon, Chinua Mbajekwe

The Demand for Electricity in Kuwait: A Cointegration

Analysis Osama Alfalah, Lama Alhumaidan, Deniz Baglan

Renewable Energy Products and Customer's Purchase Intentions having Environmental Concern

Muhammad Imran Malik, Mubashir Ahmad, Arif Hussain, Farida Saleem, Muhammad Kashif Durrani, Shabir Hyder, Saiqa Saddiqa Qureshi, Shoaib Imtiaz, Shumaila Malik

Z-numbers Based Hybrid MCDM Approach for Energy Resources Ranking and Selection Mahammad Nuriyev

Examining the Economic Impact of Renewable Energy in Green Buildings: A Case

Study of Jordan Ghani Albaali, Mohammed Shahateet, Khaled AL-Naif, Saud Altayeb, Abdul Ghafoor Saidi

The Economic Impacts of Natural Resource Dependency in

Gulf Countries Ruba Abdullah Aljarallah

Institutional Environment and the Strategies of the Firms of the Brazilian

Electricity Industry Andre Luis da Silva Leite, Nei Antonio Nunes

Energy Consumption and Economic Growth: Evidence from Post-Communist Countries

Uktam Umurzakov, Bakhodir Mirzaev, Raufhon Salahodjaev, Arletta Isaeva, Shakhnoza Tosheva

Strategies of Expansion for Electric Power Systems Based on Hydroelectric Plants in the Context of Climate Change: Case of Analysis of Colombia

J. Restrepo-Trujillo, Ricardo Moreno-Chuquen, Francy Nelly

Jiménez-García Wind Power: Current State and Perspectives

Vladimir Yu. Linnik, E. Yu. Voronova, Larisa V. Pavlyuk, Alexey Zich

Energy-GDP Nexus for Oil-Exporting Country: The

Case of Bahrain Mohamed Sayed Abou Elseoud, Fuad

M. Kreishan

Effects of Energy Consumption, Economic Growth and Urbanization on Indonesian Environmental Quality

Husna Purnama, Toto Gunarto, Ida Budiarty

The Impact of Energy Production, Consumption and Import on the Budgetary Energy

Requirement of Indonesia

Bambang Santoso Haryono, Abdul Hakim, Mardiono Mardiono, Safri Safri, Qomariyatus Sholihah

Study of Factors Affecting Micro-barriers that Hinders the Development of Private Enterprises: Mediating Role of Intention to Use of Renewable Energy

Phan The Cong, Pham Thi Minh Uyen

The Impact of Renewable Energy Consumption on the Economic Growth of the ASEAN Countries Sri Fadilah, Rini Lestari, Mohd Hadafi Sahdan, Ahmad Zamil Abdul Khalid

Personal Carbon Trading, Carbon-Knowledge Management and Their Influence On Environmental Sustainability In Thailand
Dadang Dally, Kurhayadi Kurhayadi, Yeti Rohayati, Soheil Kazemian

The Impact of Renewable Energy Consumption and Economic Growth on CO2 Emissions: New Evidence using Panel ARDL Study of Selected Countries
Mohd Shahidan Shaari, Noorazeela Zainol Abidin, Zulkefly Abdul Karim

Isomorphic Drivers of Institutional Pressure and Importance of Environmental Management System Implementation Towards The Adoption Propensity of Green ICT
Kazi Sirajul Islam, Saravanan Muthaiyah, David Yong Gun Fie

Renewable Energy - Economic Growth Nexus in South Africa: Linear, Nonlinear or Non-existent? Bothwell Nyoni, Andrew Phiri
A Forecasting Model on Carrying Capacity for Government's Controlling Measure under Environmental Law in Thailand: Adapting Non-Recursive Autoregression based on the Var-X Model
Pruethsan Sutthichaimethee, Danupon Ariyasajakorn

Pollution, Energy and Growth: Evidence from Post-Communist Countries
Avazbek Sadikov, Nargiza Kasimova, Arletta Isaeva, Anastas Khachaturov, Raufhon Salahodjaev Investments in Energy Conservation: Policy Implications for Pakistan
Saba Anwar, Hafsa Hina, Fahad Sultan, Muhammad Ibrahim Khan, Muzaffar Abbas, Perfecto G. Aquino

Study the Possibility of Address Complex Models in Linear and Non-Linear Causal Relationships between Oil Price and GDP in KSA: Using the Combination of Toda-Yamamoto, Diks-Panchenko and VAR Approach
Hassan Tawakol A. Fadol

Analysis of Energy Consumption in Colombia Using the Holt Method
Jheison Contreras-Salinas, Fernando Lopez, Carlos A Rondon-Rodriguez, Hugo g Hernández Palma, Juan-David De-la-Hoz-Hernandez

Reducing CO2 Emissions through Biogas, Wind and Solar Energy Production: Evidence from Indonesia Lilis Yuaningsih, R. Adjeng Mariana Febrianti, Hafiz Waqas Kamran The Impact of Environmental and Social Disclosure on Earnings Persistence Thai Van Ha, Amena Sibghatullah, Sang Soo Chae,

Talla M. Aldeehani

The Impact of Budget, Accountability Mechanisms and Renewable Energy Consumption on Environmentally Sustainable Development: Evidence from Indonesia

Jozef R. Pattiruhu

The Role of Intellectual Human Capital, Human Resource Practices and Intention to use of Energy Resources on the Company Performance

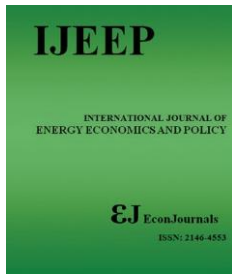
Didin Fatihudin, Murpin Josua Sembiring, Muhammad Anang Firmansyah, Iis Holisin

Energy Consumption and Economic Growth Nexus in Nigeria: Evidence based on ARDL Bound Test Approach

Lasbrey Anochiwa, Oguwuike Michael Enyoghasim, Kalu E. Uma, C. Paul Obidike, Iyke Uwazie Uwazie, Ikwor Okoroafor Ogbonnaya, O. Richard Ojike, Clara Kelechi Anyanwu

Sustainable Energy in Island States: Comparative Analysis of New Trends in Energy Digitalization and the Experience of the UK, Japan, Indonesia and Cyprus

Olga V. Loseva, Svetlana V. Karpova, Konstantin O. Rasteryaev, Elizaveta S. Sokolova, Svetlana V. Makar, Khvicha P. Kharchilava



The Role of Intellectual Human Capital, Human Resource Practices and Intention to Use of Energy Resources on the Company Performance

Didin Fatihudin^{1*}, Murpin Josua Sembiring², Muhammad Anang Firmansyah¹, Iis Holisin³

¹Department of Economics and Business, Muhammadiyah University, Surabaya, Indonesia, ²Department of Economics and Business, Ma Chung University, Malang Indonesia, ³Department of Mathematics Educations, Muhammadiyah University, Surabaya, Indonesia. *Email: didin.fatihudin@fe.um-surabaya.ac.id

Received: 15 July 2020

Accepted: 17 September 2020

DOI: <https://doi.org/10.32479/ijeep.10623>

ABSTRACT

The study aimed to analyze the relationship between the performance of companies and human capital with the help of moderating role of intention to use of renewable energy through various modes while providing an eminent view of the literature. The approach of quantitative has been used by this study. While reviewing the literature, the permitted issues are covered into three categories which were neglected previously: human capital analysis – relationships of management performance along with the intention to use of renewable energy, measuring and defining of human and intellectual capital, and HRM. Intention to use renewable energy significantly and positively moderates among the relationship between intellectual human capital, and the company's performance. The results of this study are pertinent to the relationship among various aspects of human resources and performance of companies which were lately experienced in rapid developments. These findings provided the guidelines to the policymakers that they should provide the focus on the formulation of the policies related to the intellectual human capital and effective use of renewable energy that enhance the company performance.

Keywords: Human Capital, Human Resources Management, Management Performance, Intentions to Use Renewable Energy

JEL Classifications: Q2, J24, O15

1. INTRODUCTION

Performance evaluation of human capital based companies is an interesting thing that companies need to develop in the future. One of the important and main elements of intellectual capital is termed as human capital under the ownership of a company. During the company's performance assessment, the use of physical resources is more this time. For the measurement of company's performance, the element of financial perspective dominates with its accuracy but the actual basis of driving financial values is considered as human capital inducing the innovations, ideas, and knowledge (Handayani and Sinulingga, 2019). Additionally, for the company, human capital is considered as a core. The

role of human resources in the future of companies countered as crucial, even though mentioning of capital for the HR widely not seems to be embraced by the people of business. The continuity of human resources counted as capital exits over time and the businesses dynamic environments and scientific progress (Suryani et al., 2017). The advantages of HR compared to other factors of production in a company's competitive strategy that is inclusive of a special enterprise, entrepreneurship and innovation, different capabilities of products and services, unique quality which could be developed according to needs.

Using the intentions of renewable energy countered as dominant sources that contribute to various elements significant for

companies. Whether discussing individual elements of companies or singly, the intentions of using renewable energy positively exit between all the relevant factors. The importance of renewable energy dominates among economic grounds and companies (Ari and Yikmaz, 2019; Chen et al., 2018). Link of renewable energy exits in performance of companies whether having positive or negative interpretations. Various factors contribute towards the company performance, while the intention of using renewable energy positively exits among the contributions (Bozorgparvar et al., 2018). Plenty of factors influences the performance of companies where intellectual human capital dominates an important one, while the using of renewable energy strongly inserts the effects among them. Various intentions are used to enhance the performance of companies whereas the existence of renewable energy dominates among the intentions for enhancing performance (Demirbag and Yilmaz, 2020). Training and development countered as eminent sources for company performance, while the use of renewable energy and its intentions puts significant impact between them. Peoples are recruited and placed in various sites for increasing the performance but the importance of renewable energy intentions and its usage inserts important aspects among them (Dogan and Ozturk, 2017). The effect of using intentions of renewable energy exits between the factors in companies that are used to enhances the level of performance.

There are five components of human capital or human resources which are named as organizational climate, individual capability, leadership, workgroup effectiveness, and individual motivation (Handayani and Sinulingga, 2019). The determination of a company's values is dependent on the components of human capital and HR which has a variant role in the creation of human capital of companies. Therefore, given the enormous role of HR in the company, the company's management should be more proactive in making HR as a human capital that must be given attention and continuous development with significant variations in the environment of businesses (Omran and Baharuddin, 2017). This study aimed to conduct eminent review both empirically and theoretically about the role of human capital or human resources in the company's performance improvement. The overview on human capital in Indonesia 2008-2017 are reported in Figure 1.

Attention to human resources and HC considered as the main producing factors for most companies is often under-ranked compared to other factors of production such as capital, technology, and money. Many company leaders are less aware that the profits derived by the company come from human capital, this is because the company's activities are seen more from the perspective of the business (Hunter et al., 2017). Companies are not seen as a unit by the leaders of companies which contain unique skills and knowledge, or unique parts of business elements that could distinguish products and services in the competitive markets from competitors.

2. LITERATURE REVIEW

There is the relevance of human capital which could be interpreted as human resources value of the economy that is linked to the commitment and energy, ideas, ability, innovation, and knowledge.

The combination of human capital is linked with the innovation, skills, knowledge and the person ability for performing duties in creating values to the goal achievements (Korauš et al., 2017). The contributions of human capital in sort of added value formations for performing works and tasks could provide revenue sustainabilities for organizations in future. In the intellectual capital, human capital is considered as lifeblood, an eminent source of improvement and innovation, while also considered as an eminent component which has difficulty in measurement (Ferreira and Franco, 2017). Studies enumerated human capital into three elements of combination that named as (1) talent and creativity, namely intelligence, person's learning ability, and imagination, (2) traits and characters that took for work, for instance, commitment, energy, reliability, intelligence, and positive attitude, (3) motivations for goals orientation, team spirit, knowledge and information (Adelere, 2017). The literature further described human capital that consists of things namely: time, effort, behaviour, and ability which are all employees controlled and owned. Studies further mentioned the relevance of company expenses that are linked to human resources might be seen as human capital investments (Luftman et al., 2017). For instance, programs of training which are aimed for adding values of employees must be focused on financing in the future.

Studies widely contributed the intention of using renewable energy an important source that significantly contributes towards various factors. However, the significance of renewable energy positively dominates among the factors that exit for company performance. The eminent usage of renewable energy positively enumerated in wide literature recalling the effects on factors influencing the company's performance (Hai et al., 2017). Different capabilities are used in wide literature for the increase of performance in companies but the prevalence of renewable energy intentions positively exits between them. The literature discussed the intentions of using renewable energy widely with various factors where the dominance of renewable energy has lasted the impacts with significant enumerating measures (Higuera-Castillo et al., 2019). The positive relationship between intellectual human capital and company performance dominates in vast literature but the importance of renewable energy could not be overlooked. The role of renewable energy intentions relates to the intellectual human capital which is linked with the performance of companies (Husin and Alrazi, 2017). Although, many factors contribute eminence in companies the prevalence of intellectual capital is significant where the intentions of using renewable energy put significant impact. Intentions of using renewable energy contribute various measures on intellectual capital, while the existence of company performance among them is also important.

For the improvement of the performance of companies as possible optimal, there is a requirement of professional and efficient human resource management. To face different challenging situations in the environment of businesses both externally and internally, the conducting of a definite process of human resource management is required by the managers of HR which could establish human capital (Behera and Mohapatra, 2017). While reviewing studies, the six dominant factors in HRM have a significant impact on the performance of the business and could also improve the competitiveness of companies. Employees

placement and recruitment is an eminent process with significant importance for the companies. For the insertion of people which could be imminent for the achievement of objectives, the first step belongs to the conducts of proper placements and recruitments in fields (Iamsomboon et al., 2020). Recruitments through human resources are considered as a process of potential withdrawals and identification of employees out of the company over the time for activities of operations. Programs of recruitments are established for evaluating the right person having talent and considerably countered as capable of vacant designations fulfilment at different stages in the organizations (Manjula and Balachandra, 2017). The success of the company in the future depends very much on the selection made on the recruitment of HR that will be accepted. It's not easy to choose the right HR in the right place. Therefore it is necessary to carry out a testing and screening process in stages both directly and indirectly. The HR selection process requires the right tools and methods to estimate the quality of prospective employees (Harlow, 2017). Therefore, the test to be carried out has been tested for validity and reliability.

The process of training employees exists in literature with a variety of impacts on companies, whether it costs or enhance the performance but the intentions of using renewable energy could prevail with dominance among them. Renewable energy could have a positive influence on the development and training in the various areas which are required for the company's performance (Kahia et al., 2017). The prevalence of renewable energy positively dominates among the factors of training and development of employees which are used for company performance but could also inert positive contribution to renewable energy intentions. Among the development and training of employees in organizations the existence of energy dominates in far literature with various examples (Komendantova and Yazdanpanah, 2017). The role of intentions of using renewable energy prevail upon the employees' rehabilitation which robustly influences the performance of companies. Several procedures are adopted in literature for the employee's induction where renewable energy significantly exits on the measures (Oduor, 2017). For the renewable energy enumerations, the role of placement and recruitment are widely elaborated in studies but the eminence of renewable energy puts significant impacts upon the performance of companies and recruitments and placements.

For anticipating the rapid environmental changes, development and training is a significant element for the companies. The literature stated: "Training and development are terms of reference to planned efforts designed to facilitate the acquisition of relevant skills, knowledge, and attitudes by organizational members." Various studies mentioned development and training through arguments of relevance with plans of businesses which are performed to the achievement of mastery employees attitude, skills, organization members, and knowledge (Ikram and Hanim, 2020). The dominant focus is upon the development which helps for improving the abilities of decision making and human relations broadening for the managements whether middle level or upper level while for the lower-level employees, training intends (implementation). Organizations that achieve higher performance and can attain high levels usually have HR reliability with the

robust motivation of work and robust commitments for achieving the missions and goals of companies (Hamdan et al., 2017). Performance of the companies could be improved optimally if the performance management of HR strives in all dimensions in organizational structures of companies. The literature described the inclusion of expected goals of companies: to attain the significant information that relates to the decisions of compensation and promotion, and the performance evaluation of employees at both levels whether managerial or subordinate (Obeidat et al., 2017). Therefore, managers effectiveness is required for the employees' valuation, management, assessment, and developments as well as continuity in performance evaluation, coaching and feedback and poor performance consequences management.

Various measures are used through the steps of placement and recruitment but the existence of intentions of using renewable energy could influence the measures through a variety of channels as stated in the literature. The use of energy resource has been positively influenced the growth of the economy around the globe (Nawaz et al., 2019). The majority of elements are designed in company procedures to attain performance forecasted but the existence of renewable energy intentions among the elements dominates in studies (Rezaei and Ghofranfarid, 2018). Various courses of renewable energy are used to establish links with countries and companies but the ultimate cooperation elements significantly enumerate the possible eminence of renewable energy. Studies used a variety of elements in the company's where different strategic measures help to enhances performance whereas the intentions of using renewable energy insert various elements that put effects among the strategies (Shakeel and Rahman, 2018). With the relevance of different factors, intentions of renewable energy usage positively described among the literature. Intellectual capital is considered as a positive key contributor among the economy whereas the intentions of using renewable energy also dominate in the ground of economy for plenty of reasons (Uyar and Beşikci, 2017).

3. RESEARCH METHOD

The motive of the ongoing study is to examine the impact of intellectual capital and HR practices on the company's performance along with the moderating role of intention to use of renewable energy. The data has been gathered by using the questionnaires from the respondents. A personal visit has been conducted and distributed around 740 questionnaires but after one month only 510 questionnaires have been received that have 68.92% response rate. The PLS-SEM has been conducted for the analysis of the data that has been collected from the respondents. The model of the study is very complex and the smart-PLS provided the best estimation in this case. The variables that have been adopted in the ongoing study consist of the one predictive variable named as Company's performance (CP) that has five items along with one moderator such as the intention to use of renewable energy (IURE) that has four items. In addition, the present research also took three predictors such as intellectual human capital (IHC) that has seven items, training and development (TD) that has five items and recruitment and placement (RP) that has four items. These variables along with their links are mentioned in Figure 2.

Figure 1: Overview on Human Capital in Indonesia 2008-2017



Source: Word Economic Forum (2017)

Figure 2: Theoretical Framework

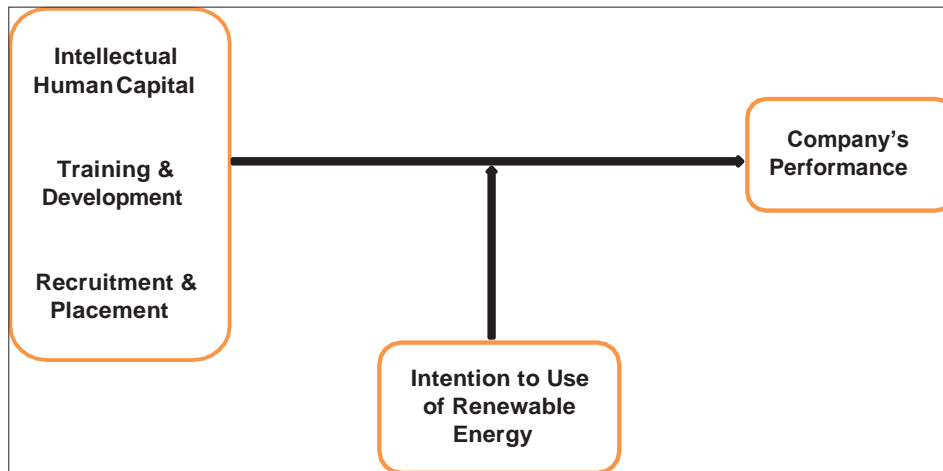
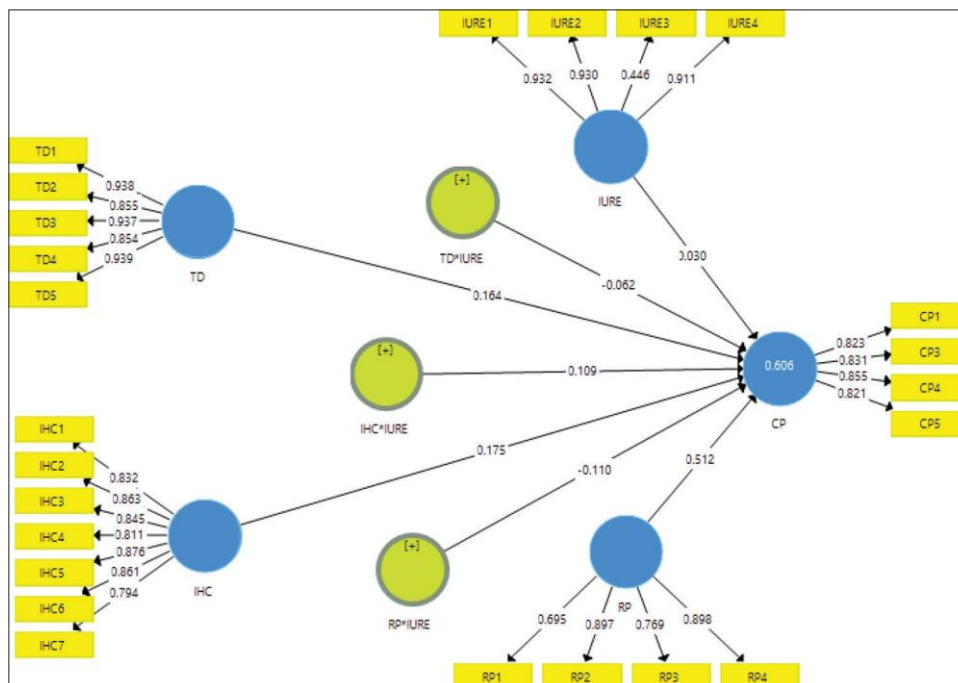


Figure 3: Measurement model assessment



Source: Authors

4. RESULTS

The findings of the ongoing research include the reliability along with validity analysis such as convergent along with the discriminant validity. In addition, the analysis also includes path analysis related to hypotheses testing. Firstly, the convergent validity has been tested by the study that highlighted the links among the items. The figures show that high values of AVE and loadings than 0.50 while high values of CR and Alpha than 0.70. These figures highlighted that high linkage among the items and valid convergent validity. These figures have been mentioned in Table 1.

Secondly, the discriminant validity has been tested with the help of Fornell Larcker and cross-loadings that highlighted the links among the constructs. The figures show that the values that show the links with construct itself are larger than the links with other constructs. These figures highlighted that no high linkage among the constructs and valid discriminant validity. These figures have been mentioned in Tables 2 and 3.

Thirdly, the discriminant validity has been checked by using Heterotrait Monotrait (HTMT) ratio. The figures show that the values of ratios are not larger than 0.90. These figures highlighted that no high linkage among the constructs and valid

discriminant validity. These figures have been mentioned in Table 4 and Figure 3.

Finally, the path analysis has been executed for the testing of the hypotheses of the study and the figures show that positive association among the intellectual human capital, and HR practices such as training and development, recruitment and placement and company’s performance. In addition, intention to use of renewable energy has positively moderated among the links of intellectual human capital, and the company’s performance. However, intention to use of renewable energy has insignificantly and negatively moderated among the links of HR practices such as training and development, recruitment and placement and company’s performance. These links are shown in Table 5 and Figures 4-7.

5. DISCUSSIONS

Variation performances could be produced by companies if companies are managed by various people, means that managing the assets of the same company by various HR could generate variant added values. Companies that own tangible assets are considered as passive without HR which could generate and manage value for companies as concluded by the studies (McDowell et al., 2018). Different studies proved the relationship between the process of HRM and performance of the companies. In the 1980s, studies

Table 1: Convergent validity

Constructs	Items	Loadings	Alpha	CR	AVE
Company’s performance	CP1	0.823	0.852	0.900	0.693
	CP3	0.831			
	CP4	0.855			
	CP5	0.821			
	CP5	0.821			
Intellectual human capital	IHC1	0.832	0.931	0.944	0.707
	IHC2	0.863			
	IHC3	0.845			
	IHC4	0.811			
	IHC5	0.876			
	IHC6	0.861			
	IHC7	0.794			
Intention to use of renewable energy	IURE1	0.932	0.831	0.893	0.690
	IURE2	0.930			
	IURE3	0.446			
	IURE4	0.911			
Recruitment and placement	RP1	0.695	0.835	0.890	0.671
	RP2	0.897			
	RP3	0.769			
	RP4	0.898			
Training and development	TD1	0.938	0.944	0.958	0.820
	TD2	0.855			
	TD3	0.937			
	TD4	0.854			
	TD5	0.939			

Table 2: Fornell Larcker

	CP	IHC	IURE	RP	TD
CP	0.832				
IHC	0.421	0.841			
IURE	0.446	0.499	0.831		
RP	0.721	0.365	0.438	0.819	
TD	0.510	0.404	0.503	0.414	0.905

Table 3: Cross-loadings

	CP	IHC	IURE	RP	TD
CP1	0.823	0.324	0.305	0.598	0.381
CP3	0.831	0.346	0.4	0.625	0.494
CP4	0.855	0.365	0.437	0.606	0.45
CP5	0.821	0.366	0.337	0.569	0.364
IHC1	0.33	0.832	0.405	0.308	0.298
IHC2	0.353	0.863	0.422	0.286	0.346
IHC3	0.321	0.845	0.397	0.279	0.311
IHC4	0.302	0.811	0.435	0.238	0.359
IHC5	0.389	0.876	0.435	0.323	0.364
IHC6	0.417	0.861	0.437	0.378	0.376
IHC7	0.342	0.794	0.403	0.314	0.312
IURE1	0.418	0.419	0.932	0.408	0.465
IURE2	0.421	0.375	0.93	0.443	0.473
IURE3	0.177	0.67	0.446	0.152	0.19
IURE4	0.407	0.399	0.911	0.381	0.47
RP1	0.423	0.207	0.348	0.695	0.284
RP2	0.723	0.369	0.35	0.897	0.408
RP3	0.501	0.245	0.34	0.769	0.247
RP4	0.655	0.34	0.41	0.898	0.387
TD1	0.465	0.344	0.46	0.365	0.938
TD2	0.459	0.395	0.446	0.398	0.855
TD3	0.468	0.345	0.462	0.363	0.937
TD4	0.453	0.399	0.448	0.394	0.854
TD5	0.463	0.344	0.457	0.352	0.939

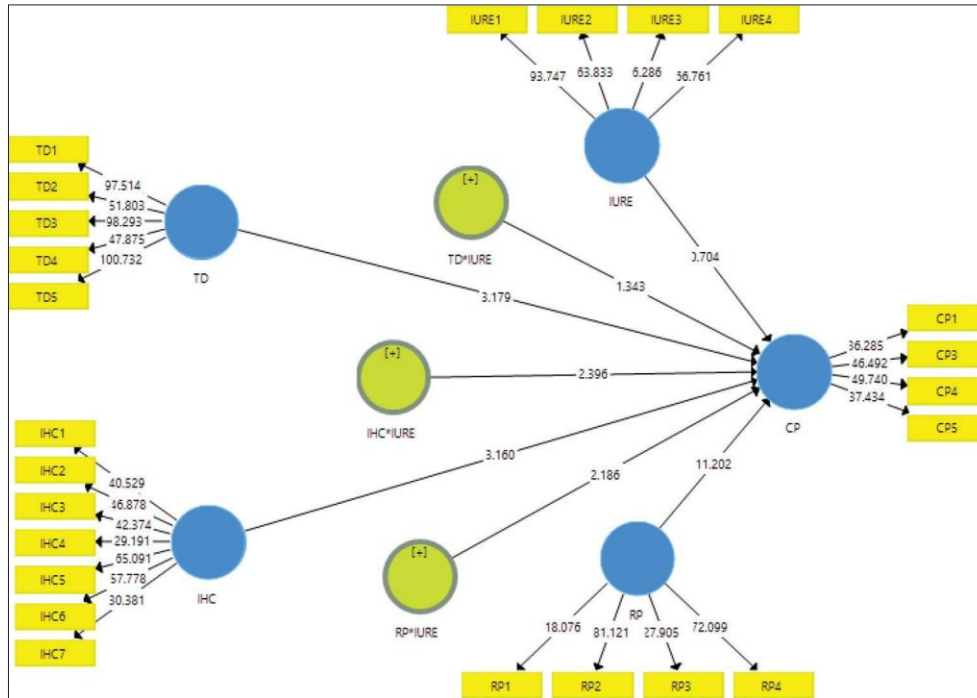
Table 4: Heterotrait Monotrait ratio

	CP	IHC	IURE	RP	TD
CP					
IHC	0.468				
IURE	0.516	0.651			
RP	0.833	0.398	0.513		
TD	0.566	0.429	0.554	0.457	

Table 5: Path analysis

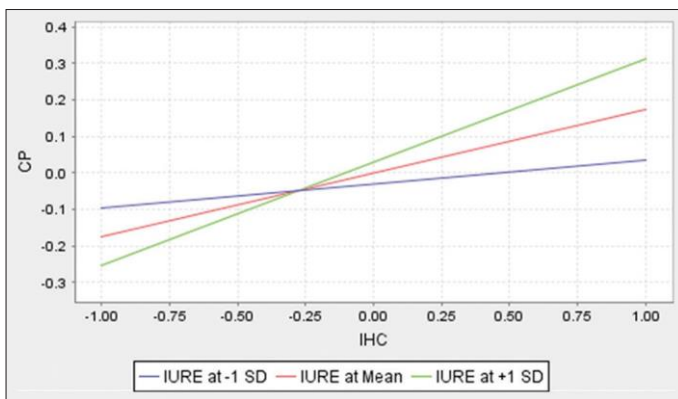
Relationships	Beta	S.D.	t-statistics	p-values	L.L.	U.L.
IHC → CP	0.175	0.055	3.160	0.002	0.062	0.277
IHC*IURE → CP	0.109	0.045	2.396	0.017	0.017	0.198
RP → CP	0.512	0.046	11.202	0.000	0.416	0.594
RP*IURE → CP	-0.110	0.050	2.186	0.029	-0.219	-0.023
TD → CP	0.164	0.052	3.179	0.002	0.066	0.267
TD*IURE → CP	-0.062	0.046	1.343	0.180	-0.141	0.033

Figure 4: Structural model assessment



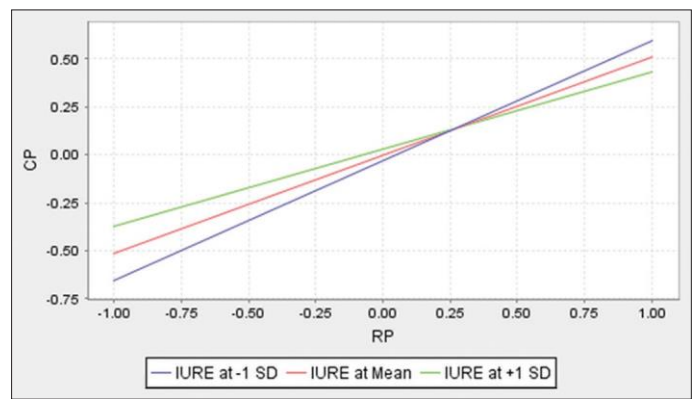
Source: Authors

Figure 5: IHC*IURE



Source: Authors

Figure 6: RP*IURE



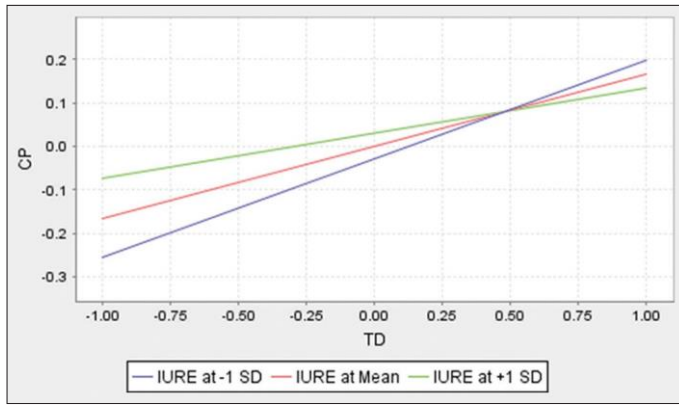
Source: Authors

empirically mixed the findings to the link among the performance of companies and human capital. Authors examined the relation among the performance of business and planning of HR and found no correlation among them (Oduor, 2017). These findings are supported by literature based on surveys which conclude no relation among corporate performance financially and practices of HR. while empirical studies in the 1990s now prove more positive and dominant link among the performance of the company and human capital. Variant studies conducted the relation among the performance of companies and capital investments dominating

the 366 companies in the UK. Findings show the association of more HR with low turnover labour which can produce higher profits per worker but low productivity (Kweh et al., 2019). By the performance estimation, there is the existence of a robust link between financial performance and productivity of HR.

Different authors widely discussed the elements of renewable energy in various studies with the dominance of measures exits in it. The use of renewable energy existed between various factors that are used to interpret the relationships and influences (Wojuola

Figure 7: TD*IURE



Source: Authors

and Alant, 2017). Even though renewable energy is countered as an eminent source for building of collaborating relationships but the effective use of renewable energy put significance among the relationship. Authors used renewable energy at various stages for the interpretation of relationships and effects through various modes of examinations (Dogan and Ozturk, 2017). The contributions toward companies are performed through enormous channels, while the reliance on renewable energy could put all possible measures among the contributing elements. The link among the development of HR and training with the performance of a company is carried out by various authors. Employees skills and knowledge through the activities of training become dominant in improving the performance of the company. Authors state the market competition where the company successfully dealing is primarily determined by HC, not PC and so the company is encouraged to invest in various training to increase the abilities, skills and knowledge of employees more compared to the competitors (Gracioli Camfield et al., 2018). Therefore, company expenditures for HR training and development activities are eminent to increase and maintain employee knowledge and expertise to be able to create a sustainable competitive advantage.

A significant planned effort termed by the development and training in the companies to improve employees abilities, skills and knowledge. Furthermore, added the similar two concepts of development and training, namely to increase abilities, skills and knowledge. However, purposely judging, generally, twice concepts could be differentiated. For the increasing of abilities to perform specific jobs, the focus is on training at the moment, and for performing the work, knowledge enhancement is focused through development in the future, performed through the approach integrated with variant activities to change the behaviour of works (Arifah, 2020). If the knowledge of individual based on strength maintained and managed, the achievement of competitive advantage could be dominant. Authors stated the determination of the success of companies is based on the abilities of companies to manage the asset of knowledge. Companies could not generate knowledge despite using interactions and actions of employees.

Compensation and rewards to continue to be able to maintain and improve the owned HR qualities. The organization is required to provide appropriate compensation and appreciation to its employees.

The company's goals are to encourage company competitiveness, align individual/group work goals with company goals, and to strengthen positive behaviour towards customers. Also, employee involvement in the design of compensation and rewards programs, an explanation of the workings of the compensation and reward systems provided by the company, the combinational use of non-financial and financial rewards and compensation components that distinguish between basic salary, incentives and variable salary are a positive thing for companies to increase employee participation (Alzuod et al., 2017). Compensation planning by a company is a strategy related to how a company positions the level of compensation given compared to its competitors. Besides compensation also illustrates how the company provides rewards to employees. With good compensation planning, it is expected that employees will be able to be maintained, especially for employees who have good performance.

6. CONCLUSION

Rapidly increasing literature have attempted to enumerate the relationship between the performance of a firm and human resources. This paper tries to carry out a brief review both theoretical and empirical link among the performance of companies and human capital, and the importance of HR company managers that how their support is linked with the significant performance. Robust performance is eminent for the companies to enhance the value of the company that can satisfy all parties, especially stockholders. The dominance of elected factors significantly influences the performance of companies whether for enhancing or disrupting measures, while the use of renewable energy also attained much importance among them. The role of intentions of using renewable energy positively influence the relationships that are countered in this study for evaluating the impacts on the company's performance. Although the company's performance could be evaluated by various means the elected factors significantly elaborated the impacts whereas the prevalence of using renewable energy intentions inserts moderating effects among them. Between the elected factors in this study used to enhance the performance of companies, the use of intentions of renewable energy positively inserts role between the factors affecting the relationship.

With all the limitations, especially the theoretical review that has not been completed, this paper is expected to provide input for companies to prepare higher quality human resources in improving the company's best performance. Company leaders are required to realize at this time about the benefits derived by the company come from human capital, not the company's activities are seen from a business perspective. Leaders of the companies are required to view companies as units which contain significant sets of skills and knowledge, or uniqueness.

REFERENCES

- Adelere, M.A. (2017), Effect of staff training and development on organisational performance: Evidence from Nigerian bottling company. *Oman Chapter of Arabian Journal of Business and Management Review*, 34(5476), 1-15.
- Alzuod, M., Isa, M., Ismail, S. (2017), Intellectual capital, innovative performance and the moderating effect of entrepreneurial orientation

- among small and medium-sized enterprises in Jordan. *International Review of Management and Marketing*, 7(2), 308-314.
- Ari, I., Yikmaz, R.F. (2019), The role of renewable energy in achieving Turkey's INDC. *Renewable and Sustainable Energy Reviews*, 105(2), 244-251.
- Arifah, P. (2020), The role of beta as a moderating variable on the relationship between intellectual capital and financial performance in consumer goods industry at Indonesia stock exchange 2010-2017. *Asian Journal of Business and Entrepreneurship*, 1(1), 1-9.
- Behera, M.P., Mohapatra, D. (2017), Strategic imperatives of training and development practices on sales performance: A case analysis of insurance company in Bhubaneswar city, Odisha. *Training and Development Journal*, 8(2), 103-112.
- Borzorgparvar, E., Yazdanpanah, M., Forouzani, M., Khosravipour, B. (2018), Cleaner and greener livestock production: Appraising producers' perceptions regarding renewable energy in Iran. *Journal of Cleaner Production*, 203(1), 769-776.
- Chen, Z., Hossen, M.M., Muzafary, S.S., Begum, M. (2018), Green banking for environmental sustainability-present status and future agenda: Experience from Bangladesh. *Asian Economic and Financial Review*, 8(5), 571-585.
- Demirbag, M., Yilmaz, S. (2020), Preservice teachers' knowledge levels, risk perceptions and intentions to use renewable energy: A structural equation model. *Journal of Education in Science, Environment and Health*, 6(3), 193-206.
- Dogan, E., Ozturk, I. (2017), The influence of renewable and non-renewable energy consumption and real income on CO₂ emissions in the USA: Evidence from structural break tests. *Environmental Science and Pollution Research*, 24(11), 10846-10854.
- Ferreira, A., Franco, M. (2017), The mediating effect of intellectual capital in the relationship between strategic alliances and organizational performance in Portuguese technology-based SMEs. *European Management Review*, 14(3), 303-318.
- Gracioli Camfield, C., Giacomello, C.P., Sellitto, M.A. (2018), The impact of intellectual capital on performance in Brazilian companies. *Journal of Technology Management and Innovation*, 13(2), 23-32.
- Hai, M.A., Moula, M.M.E., Seppälä, U. (2017), Results of intention-behaviour gap for solar energy in regular residential buildings in Finland. *International Journal of Sustainable Built Environment*, 6(2), 317-329.
- Hamdan, A.M., Buallay, A.M., Alareeni, B.A. (2017), The moderating role of corporate governance on the relationship between intellectual capital efficiency and firm's performance: Evidence from Saudi Arabia. *International Journal of Learning and Intellectual Capital*, 14(4), 295-318.
- Handayani, P., Sinulingga, N.A.B. (2019), The Effect of Employee Recruitment and Selection on Employee Performance on the CV. LPK. *Journal of Management Science (JMAS)*, 1(3), 19-23.
- Harlow, H.D. (2017), Chief knowledge officers and other knowledge management executives effect on strategic intent, intellectual capital generation, and firm performance? An empirical research study of chief knowledge officers and knowledge executives in the USA. *Electronic Journal of Knowledge Management*, 15(3), 170-182.
- Higuera-Castillo, E., Liébana-Cabanillas, F., Muñoz-Leiva, F., Molinillo, S. (2019), The role of collectivism in modeling the adoption of renewable energies: A cross-cultural approach. *International Journal of Environmental Science and Technology*, 16(4), 2143-2160.
- Hunter, S.T., Shortland, N.D., Crayne, M.P., Ligon, G.S. (2017), Recruitment and selection in violent extremist organizations: Exploring what industrial and organizational psychology might contribute. *American Psychologist*, 72(3), 242.
- Husin, N., Alrazi, B. (2017), Renewable energy investment in Malaysia: An integrated model in evaluating public decision making process. *Journal of Clean Energy Technologies*, 5(4), 343-346.
- Iamsomboon, N., Sukortprommee, S., Klinpratum, V. (2020), Creating employee working skills and performance through organizational training practices in abc tire manufacturing company. *RMUTT Global Business Accounting and Finance Review*, 4(1), 104-110.
- Ikram, S., Hanim, W. (2020), Effects of growth and learning and internal business processes on financial performance (survey of regional water company (PDAM) in java). *International Journal of Psychosocial Rehabilitation*, 24(2), 259-270.
- Kahia, M., Aïssa, M.S.B., Lanouar, C. (2017), Renewable and non-renewable energy use-economic growth nexus: The case of MENA net oil importing countries. *Renewable and Sustainable Energy Reviews*, 71(3), 127-140.
- Komendantova, N., Yazdanpanah, M. (2017), Impacts of human factors on willingness to use renewable energy sources in Iran and Morocco. *Environmental Energy and Economic Research*, 1(2), 141-152.
- Koraus, A., Kaščáková, Z., Parová, V., Veselovská, S. (2017), Sustainable economic development through human resource management: Social intelligence of managers and performance. *Journal of Security and Sustainability Issues*, 6(3), 59-81.
- Kweh, Q.L., Ting, I.W.K., Hanh, L.T.M., Zhang, C. (2019), Intellectual capital, governmental presence, and firm performance of publicly listed companies in Malaysia. *International Journal of Learning and Intellectual Capital*, 16(2), 193-211.
- Luftman, J., Lyytinen, K., Zvi, T.B. (2017), Enhancing the measurement of information technology (IT) business alignment and its influence on company performance. *Journal of Information Technology*, 32(1), 26-46.
- Manjula, P., Balachandra, P. (2017), A study on various training programmes and their effects offered by the IT firms. In: Paper Presented at the Proceedings of the 5th International Conference on Frontiers in Intelligent Computing: Theory and Applications. Berlin, Germany: Springer.
- McDowell, W.C., Peake, W.O., Coder, L., Harris, M.L. (2018), Building small firm performance through intellectual capital development: Exploring innovation as the black box. *Journal of Business Research*, 88(1), 321-327.
- Nawaz, M.A., Azam, M.A., Bhatti, M.A. (2019), Are natural resources, mineral and energy depletions damaging economic growth? Evidence from ASEAN countries. *Pakistan Journal of Economic Studies*, 2(2), 45-53.
- Obeidat, B.Y., Tarhini, A., Masa'deh, R.E., Aqqad, N.O. (2017), The impact of intellectual capital on innovation via the mediating role of knowledge management: A structural equation modelling approach. *International Journal of Knowledge Management Studies*, 8(3-4), 273-298.
- Oduor, O.G. (2017), Talent attraction strategy and employees' productivity in private sugar companies in Kakamega county, Kenya. *International Journal of Multidisciplinary and Current Research*, 5(2), 1174-1180.
- Omran, A., Baharuddin, A.H. (2017), Determining the causes and effects of project manager's turnover on project performance in penang state, Malaysia. *Journal of Academic Research in Economics*, 9(3), 10-23.
- Rezaei, R., Ghofranfarid, M. (2018), Rural households' renewable energy usage intention in Iran: Extending the unified theory of acceptance and use of technology. *Renewable Energy*, 122(3), 382-391.
- Shakeel, S.R., Rahman, S.U. (2018), Towards the establishment of renewable energy technologies' market: An assessment of public acceptance and use in Pakistan. *Journal of Renewable and Sustainable Energy*, 10(4), 045907.

- Suryani, N.K., Made, W., Ketut, S.D., Ketut, S.I.B. (2017), Human resources management practice and organizational performance (a case study of line manager support in star hotel Bali Indonesia). *International Business Management*, 11(7), 1523-1531.
- Uyar, T.S., Beşikci, D. (2017), Integration of hydrogen energy systems into renewable energy systems for better design of 100% renewable energy communities. *International Journal of Hydrogen Energy*, 42(4), 2453-2456.
- Wojuola, R.N., Alant, B.P. (2017), Public perceptions about renewable energy technologies in Nigeria. *African Journal of Science, Technology, Innovation and Development*, 9(4), 399-409.
- World Economic Forum (2017), The global human capital report 2017 <https://www.weforum.org/reports/the-global-human-capital-report-2017>