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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL ILMIAH

Judul karya ilmiah (artikel) : Control Effectiveness And Fraud: Evidence In Indonesia Cooperative
 Jumlah Penulis : 3 Orang
 Status Pengusul : Penulis ke 3
 Nama Penulis : **Dr. Indira Januarti, SE, M.Si, Akt**

Identitas : a. Nama Jurnal : International Journal Of Scientific & Technology
 Jurnal Ilmiah Research
 : b. Nomor ISSN : ISSN 2277-8616
 : c. Volume, nomor, bulan, tahun : Volume 9, Issue 02, February 2020, Pages 2856-2859
 : d. Penerbit : International Journal of Scientific and Technology Research
 : e. DOI artikel (jika ada) :
 : f. Alamat web jurnal : <http://www.ijstr.org/final-print/feb2020/Control-Effectiveness-And-Fraud-Evidence-In-Indonesia-Cooperative.pdf>
 : g. Terindeks di scimagojr / Thomson Reufer ISI knowledge atau di nasional / terindeks di DOAJ, CABI, Copernicus : <https://www.scopus.com/sourceid/21100894501>

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 Jurnal Ilmiah Nasional/ Nasional terindeks di DOAJ, CABI, Copernicus


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c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	12					10
d. Kelengkapan unsur dan kualitas penerbit (30%)	12					10,5
Total = (100%)	40					34,4
Nilai pengusul = (40% X 34,4)/2 = 6,88						6,88

KOMENTAR/ ULASAN PEER REVIEW	
• Kelengkapan dan kesesuaian unsur	Penulisan sudah cukup sesuai dan lengkap, mencakup: judul, pendahuluan,, sampai dengan kesimpulan, dan daftar pustaka. Substansi artikel sesuai bidang ilmu pengusul sebagai penulis ketiga (Ilmu Akuntansi).
• Ruang lingkup dan kedalaman pembahasan	Substansi artikel cukup sesuai dengan ruang lingkup jurnal (International Journal Of Scientific & Technology Research). Kedalaman pembahasan cukup baik didukung dengan sumber referensi yang cukup memadai terkait dengan control, dan fraud.
• Kecukupan dan Kemutakhiran Data & Metodologi	Data dan metodologi merupakan metode yang cukup baru dengan hasil penelitian menunjukkan cukup adanya kebaruan informasi tentang fraud.
• Kelengkapan unsur dan kualitas penerbit	Jurnal ini termasuk sebagai jurnal internasionalterindeks scopus, dapat ditulur ke: https://www.scopus.com/sourceid/21100894501 .
Indikasi plagiasi	Hasil uji ternutin menunjukkan similarity index = 7% Hasil uji ternutin menunjukkan similarity index = 7%
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Semarang, 2020

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a. Kelengkapan unsur isi artikel (10%)	4					3,8
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c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12					10
d. Kelengkapan unsur dan kualitas penerbit (30%)	12					10
Total = (100%)	40					34,6
Nilai pengusul = 0,4/2						6,92
KOMENTAR/ ULASAN PEER REVIEW						
• Kelengkapan dan kesesuaian unsur	Semua unsur yang menjadi kriteria penilaian telah ditulis dengan lengkap dan berurutan.					
• Ruang lingkup dan kedalaman pembahasan	Penjelasan terhadap perilaku yang tidak etis ketika melakukan fraud telah dijelaskan secara cukup. Pembahasan hipotesis didukung dengan data kuantitatif dari deskripsi statistik					
• Kecukupan dan Kemutakhiran Data & Metodologi	Menggunakan data primer, karyawan di perusahaan yang ada di Semarang. Pengambilan sampel, cara pengukuran variabel telah dijelaskan.					
• Kelengkapan unsur dan kualitas penerbit	Masuk kriteria Q3 dengan nilai SJR 0,12 dan H index 15					
Indikasi plagiasi	Hasil uji Turnitin sebesar 7%					
• Kesesuaian bidang ilmu	Bidang kajian keperilakuan di akuntansi forensic.					

Semarang, 17 April 2020

Reviewer 2



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International Journal of Scientific and Technology Research
Volume 9, Issue 2, February 2020, Pages 2856-2859

Control effectiveness and fraud: Evidence in Indonesia cooperative (Article)

Utaminingsih, N.S. ✉️, Chariri, A., **Januarti, I.** ✉️

Diponegoro University, Indonesia

Abstract

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This study investigated the factors that influence employee fraud in economic entities in the form of cooperatives. The uniqueness of the cooperative is oriented to the welfare of members and management is dominated by members, so it is possible to give different results from previous research. The research sample of 97 cooperative employees in the city area of Semarang, Indonesia. Partial least square (PLS) is used as an analysis tool. The results showed that the effectiveness of control, organizational commitment and compensation sufficient significantly influence employee fraud. While unethical behavior does not affect fraud. The indirect effect showed that control effectiveness can mediate on relationship between organization commitment to fraud. IJSTR©2020.

SciVal Topic Prominence ⓘ

Topic: Medical Ethic | Protestant Work Ethic | Islamic

Prominence percentile: 72.991 ⓘ

Author keywords

Compensation sufficient Control Effectiveness Fraud Organization Commitment Unethic behavior

ISSN: 22778616

Source Type: Journal

Original language: English

Document Type: Article

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Identifying AEAP ALAP Sequences For Optimization Using Dependency Structures

M.Sangeetha, Dr.S.Malathi

Software Testing is a process of analysis whether a system or a product complies with needs of customer requirements. It is mainly performed by testing team using different tools and techniques and the main target is to identify different behavior in the software project and to make sure quality. Generally testing is not done completely, instead it focuses on different test stages in testing like Unit, Integration, System, User Acceptance etc., and before launching it to the real world testing confirms the performance of the product. Testing also prevents product failure or wastage of cost. Access the quality of the final product delivered to the customer is the main aim of testing. Different phases of Testing life cycle focuses on – Test plan, Test design, Test execution, Defect reporting and tracking it to closure etc., test designing is writing of test cases based on requirements are the main blocks of testing. Very crucial in this testing life cycle is writing effective test cases in minimum time period. Criticality and risks is a key task of tester to sequence the test cases based on the priority of test case generation. Proposed methodology is to improve the detection of fault at the earlier phase like planning. This methodology provides the sequential order in as per the dependency of modules. In this paper we mainly identifying the modules along with cyclic blocks to be tested in sequence during the planning phase and prioritize this with OATS techniques and dependency structure.

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1-4

A Hybrid Ifcsa Approach For Optimal Location And Capacity Of Upfc To Improve Power System Dynamic Stability

T. Jagan Mohan Raju, .G. Tulasiram, Soumya K

In this manuscript, the hybrid technique based on optimal location and the capacity of UPFC to improve the dynamic stability of the power system are proposed. The proposed hybrid technique is the joint execution of both the Improved Fruitfly Algorithm (IFA) and Crow Search Algorithm (CSA) and hence it is said to be as IFCSA. Here, the searching behavior of the fruit flies is enhanced by the crossover and mutation technique and hence it is termed as improved FA (IFA) technique. The novelty of the proposed hybrid technique is exemplified in the improved searching ability and reduced complexity. In this regard, the generator fault affects the dynamic stability of the system constraints such as voltage, power loss, real and reactive power. IFA technique optimizes the maximum power loss line as the UPFC suitable location. By using the CSA, the affected location parameters and dynamic stability constraints are restored into secure limits using the UPFC optimum capacity and accordingly the CSA reduces the UPFC cost. The attained UPFC capacity has been located in the affected location and the system power flow is analyzed. The proposed hybrid technique is implemented in the MATLAB/Simulink platform and tested under standard bench mark system. The proposed method performance is evaluated by comparison with various existing techniques such as ABCGSA and FOAPSO algorithms. The comparison results invariably prove the proposed hybrid technique effectiveness and confirm its potential to solve the related issues.

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5-18

Evolution Of Optimization Algorithm Operated Robotic Arms With Different DOF

Ashwani K., Vijay B., Darshan K.

In this paper, the main emphasis is on reviewing the different types of optimization techniques proposed on the different axis of rotation of the robotic arms. The optimization depends on the various parameters of the robotic arm for the movement and the end-effectors. For a small change in the movement of the source to the destination, several variables will give rise to changes in the accuracy and efficiency of the robotic arm. Various parameters like forward and inverse kinematics analysis, position error, joint displacements, velocity, acceleration, energy, path planning and obstacle avoidance etc. have been optimized using different various optimization techniques on different degrees of freedom robotic manipulators. Some Evolutionary algorithms such as Ant colony optimization, Bacterial foraging optimization, Artificial bee colony, Firefly algorithm, and Grey wolf optimization have been discussed. Comparative reviews for different variables for the different axis of rotation of robotic arms have been performed.

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19-26

The Advent Of Ownerless Businesses: Decentralised Autonomous Organisations

Parina Anand, Anamika Chauhan

The introduction of blockchain and distributed ledger technologies have brought about numerous innovations, disrupting industries and societies. One of the most impactful among these innovations is the advent of the Decentralised Autonomous Organisations or DAOs. DAOs are a complex structure both legally and technologically whereby the company is in effect turned into code. Centralised governance structures monopolise power, leading to inequitable distribution of resources in the hands of the elite. This new form of organisation would have an effect on government as well as business structures, leading up to a fairer, equitable and collaborative society. This paper analyses the origins, implementation and uses of DAOs to highlight the potential impact it will have on economies and societies.

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2848-2852

Effectiveness Of Accessing The Communication Networks In Education

S. Sunitha , Dr. A .Catherin Jayanthi

A communication network is a set of methods that users work to transfer a worthy message. It is the technique of all means of communication, methods of a grouping works to communicate. Network is considered as ergonomic. They help to track the different types of communication as per the need of the user. The communication network is also said to be the pattern of contacts among the organization members of the flow of information among them. It helps to contacts in various patterns through communication charts. The network depends upon the importance of the organizations. The foundation of good communication is a trust and sincere transmission and receiving of information. A communication network shows a pattern of some information flow among organizations. The importance of communication networks lies in their probable clout on effectiveness. In the field of education, five various types of communication networks have been mentioned. These five networks reflect the centralized the process in which the message flow through a pivotal person. This article deals with how the communication network helps in the depending area of Education and how enormous the network is. And how it gives or sketches the information using the communication networks.

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2853-2855

Control Effectiveness And Fraud: Evidence In Indonesia Cooperative

Nanik Sri Utaminingsih, Anis Chariri, Indira Januarti

This study investigated the factors that influence employee fraud in economic entities in the form of cooperatives. The uniqueness of the cooperative is oriented to the welfare of members and management is dominated by members, so it is possible to give different results from previous research. The research sample of 97 cooperative employees in the city area of Semarang, Indonesia. Partial least square (PLS) is used as an analysis tool. The results showed that the effectiveness of control, organizational commitment and compensation sufficient significantly influence employee fraud. While unethical behavior does not affect fraud. The indirect effect showed that control effectiveness can mediate on relationship between organization commitment to fraud.

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2856-2859

Scrutiny Of Prophecy Chronic Kidney Diseases Through Data Mining Techniques

Dr.M.Renuka Devi, S.Suganyadevi

Effort of bringing out the valuable and necessary information from repository of data is data mining. Mining of data is very much required as because the huge repository of data may contain few outliers in general. Mining of data is not restricted only to text data but also to image mining, assessment mining, web mining, content mining, diagram mining so on. The purpose of mining is not limited to extracting data but also to make decisions and foresee the business in long run. Mining the information has become the most essential task in order to extract the patterns that are in frequency. It is done for the cause of social welfare. Information mining is very effective and most wanted technique to implemented in the fields where there are no convenience to select the treatment for certain diseases in medical field. The mined information contains the details about the required devices, materials and the protocols that is to be followed during the treatment. These information are very helpful the specialist to know the best available options to be provided for the patient. The information of these data is more likely to share the responsibilities of the patient administration. The data that are generated form the past history can be utilized for analyzing the patient with similar disorders. This type of data arrangement enhances the smart work and efficiency of the treatment. A common scenario that prevails cross nations is the infection that is caused in the urinary track which is mostly in the urinary organ (CKD). It is an alarming issue that is to be taken into consideration. Health problems in urinary organ become an ever ending issue when there is a painful injury in the kidneys. Due to this kind of injuries it becomes difficult for the kidneys to channel the toxic materials from body, this kind of injuries it becomes difficult for the kidneys to channel the toxic materials from body. The current work concentrates in providing identification methods and analyzing techniques for life threatening diseases like Chronic renal disorder (CKD) by applying data mining techniques like Classification techniques like Naive mathematician, Artificial Neural Network(ANN),C4.5 to predicts phases of Chronic urinary organ disease(CKD). at the earlier stage.

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2860-2862

Identifying AEAP ALAP Sequences For Optimization Using Dependency Structures

M.Sangeetha,Dr.S.Malathi

Abstract: Software Testing is a process of analysis whether a system or a product complies with needs of customer requirements. It is mainly performed by testing team using different tools and techniques and the main target is to identify different behavior in the software project and to make sure quality. Generally testing is not done completely, instead it focuses on different test stages in testing like Unit, Integration, System, User Acceptance etc., and before launching it to the real world testing confirms the performance of the product. Testing also prevents product failure or wastage of cost. Access the quality of the final product delivered to the customer is the main aim of testing. Different phases of Testing life cycle focuses on – Test plan, Test design, Test execution, Defect reporting and tracking it to closure etc., test designing is writing of test cases based on requirements are the main blocks of testing. Very crucial in this testing life cycle is writing effective test cases in minimum time period. Criticality and risks is a key task of tester to sequence the test cases based on the priority of test case generation. Proposed methodology is to improve the detection of fault at the earlier phase like planning. This methodology provides the sequential order in as per the dependency of modules. In this paper we mainly identifying the modules along with cyclic blocks to be tested in sequence during the planning phase and prioritize this with OATS techniques and dependency structure.

Index Terms: prioritization, faults, test cases, cyclic blocks, sequence.

1. INTRODUCTION

Software engineering is engineering discipline that focuses on software product stages Plan Analyze design coding testing and implementation. Software testing is a process of analyzing software to detect the difference between existing system and actual requirement. Difference is called as defect or bugs. Software Testing is a separate study under Software Engineering which has a detailed life cycle process that includes “Feasibility analysis”, “Test Plan”, “Test Design”, “Test Execute” and “Defect reporting and tracking”. It is an investigation conducted to provide customers with details about quality of the product. Highly qualified staffs ensure that software product built on time within budget with respect to attributes such as reliability, correctness ability and usability to satisfies the customer requirement. Testing Process, in the software engineering, is the set of methods, practices, standards documents, activities, policies, and procedures that software engineers use to preserve a software system and its associated artifacts, such as project and test plans, design documents code and manuals Process has been developed as a series of phases, procedures, and steps that result in the production of a software product embedded within the several processes. Validation is the process of evaluating a software system or components during or at the end of, the development cycle in order to determine whether it satisfy the specified requirements. It is usually associated with traditional execution-based testing that is exercising the code with test cases Verification is the process of evaluating a software system or component to establish whether the products of a given development phase satisfy the conditions imposed at the start of that phase.

Effective software testing will help to the delivery of reliable and quality-oriented software product. If the product is qualified then it has more satisfied users, lower maintenance cost, and more accurate and reliable result. All software projects include dedicated testing as a separate team. A test specialist is one whose education is based on the principles, practices and processes that comprise the software engineering discipline, and whose specific focus is on one area of that discipline – software testing. A test specialist who is trained as an engineer should have knowledge of test related principles, processes, measurements, standards, plans, tools and methods, and should learn how to apply them to the testing tasks to be performed. Time and budget plays major role for the success of task completion. For the successful project quality must be ensure the cost of the project and minimizing delivery time. Day by day there is rapid growth in technology increases the demand for high quality software. Test case prioritization is a process of organizing or selecting the test cases in sequence to increase the fault detection rate at the earlier stage, which helps to find critical defects as earlier as possible in the software testing life cycle. Drastically testing costs will get reduced if we identify defects as early as possible in the testing life cycle. Test Suite Optimizer developed for the purpose of testing pair – wise combinations of the test cases during the design phase. It ensures minimal test case designing with maximum coverage of defects for optimization of test cases. Test sequencing is a major challenge that will lead to diminished quality of work product. Improper test sequencing affects the proposed test schedule, planned budget. When budgets are not properly estimated, it becomes expensive. The aim of usability testing is to observe people using the product to discover errors and need to improve the areas. It measures efficiency, accuracy, recall, and emotional response. Testing that validates ease of use, speed and aesthetics of the product from the user's point of view. It is a process to identify discrepancies between the user interface of the product and the human user requirements, in terms of the pleasantness. Security testing is a process to establish that an protects data and maintains functionality as intended. Security testing as a term has a number of different meanings and can be completed in a number of different ways. As such a Security categorization helps us to understand these different approaches and

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Pedagogical Education Of Parents For The Purpose Of Prevention Of Extremism In The Youth Environment In The Condition Of Economic Instability Of The Polyethnic Region

Aida Rafikovna Mustafayeva, Lyudmila Igramudinovna Gaydarova, Aksana Dzhamalutdinovna Kurbanova, Paynusat Aliaskhabovna Magomedova, Sabina Feytulakhovna Ismailova

Abstract: The problem of pedagogical education of parents is considered in the article. The main attention is paid to the formation of moral attitudes in the family and the prevention of extremism in the youth environment in the context of the economic instability of a polyethnic region. Extremism in the youth environment has become a mass phenomenon in our country. One of the most vulnerable to extremism social groups is youth. The wide spread of youth extremism is evidence of the insufficient social adaptation of young people, the development of the asocial attitudes of their consciousness, which cause illegal patterns of behavior.

Index Terms : family, parents, education, upbringing, morality, society, culture, polyethnicity, extremism, economic instability.

1INTRODUCTION

Relevance of the topic determined by the need of complex scientific understanding of the nature, specificity and practical ways to organize social and cultural extremism prevention, economic instability, multi-ethnic region. Extremism, especially extremist behavior among youth, is an extraordinary phenomenon, often causes serious consequences for the state, society and the individual. Manifestations of extremism in the youth environment have now become more dangerous for society than in all previous periods of the state's existence. At present, in Russia there are about 150 youth extremist organizations with a clear hierarchy, discipline, with their own ideology and with their leaders. In the youth environment, as a rule, extremism is manifested in deformations of consciousness, enthusiasm for nationalist, neo-fascist ideologies, new religious doctrines unconventional for the Russian Federation, participation in the activities of radical movements and groups, committing unlawful, and sometimes criminal actions in connection with their beliefs. Moreover, there is a growing understanding in society that the only criminological way to prevent these dangerous crimes cannot be recognized as the only true one, and therefore socially effective.

This determines the particular relevance of the development of the pedagogical concept of socio-cultural prevention of extremism and its scientific research. The theory of sociocultural activity still lacked a scientific and pedagogical substantiation of the methodology, theory and practice of the prevention of extremism in the process of organizing socio-cultural interaction and varied socio-cultural activity. At the same time, one should take account of the fact that pedagogical analysis of the education of parents of socio-cultural prevention of extremism is caused by socio-economic, socio-political and regulatory conditions, the totality of which is a prerequisite for broad primary prevention of extremist behavior and the spread of the ideology of extremism, and to prevent the growth manifestations of aggressiveness, xenophobia, nationalism and other asocial phenomena. The economic instability occurring in Russian society has affected all its social groups. One of the largest socio-demographic entities is youth. It figures prominently in the social structure of society and performs the function of change, generations, acts as the main resource of society, and is directly involved in the reproduction of its social potential. It is the main representative of the innovative component of the country's development. Energy, the spirit of freedom, drive for novelty is an integral feature of the modern generation of youth. Youth acts as an object and subject of socialization at the same time, gaining new knowledge, perceiving and developing "the experience of previous generations. In the process of socialization, young people are included in the life of society, becoming its integral part. The transition of Russian society toward a new formation is accompanied by profound shifts in the system of conditions and factors of socialization of youth, intensifying the process of social differentiation and split among the younger generation. Significant changes have taken place in the forms, content, mechanisms of sociocultural continuity, in the processes of self-realization, self-affirmation. The problems of the quality of education, employment, social insecurity and ensuring the personal safety of young people have become worse. Alcoholism and drug addiction are becoming more widespread as well as cases of manifestation of national intolerance, racism, and extremism have become more frequent among

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The Comparative Analysis Of Self-Assessment Of Pre-Service Physical Science Teachers On The Extent Of Their Acquisition Of The 21st Century Skills In Selected Regions In The Philippines

Teresita C. Molano, Romano P. Cammayo, Georgina M. Dioses, Jesusimo L. Dioses, Jr.

Abstract: The study analyzed the 21st Century Skills of Pre-Service Teachers of Region II, Philippines. The study used descriptive method of research and correlational analysis to determine the significant relationship between the self-assessments of the respondents of their skills as compared with the 21st century skills according to group of respondents. Result shows that in terms of year level, there was a very significant difference between year level and the pre-service teachers' extent of acquisition of the 21st century skills. In addition, Fourth year pre-service teachers demonstrated higher 21st century skills higher than the third year pre-service teachers. On the other hand, if type of school is to be considered, there was a very significant difference between type of school and the pre-service teachers' extent of acquisition of the 21st century skills for critical thinking, flexibility and adaptability, communication, collaboration, and creativity and innovation. Moreover, there was a significant difference between type of school and the pre-service teachers' extent of acquisition of information and communications technology skills (ICT) and there was no significant difference between type of schools and the pre-service teachers' extent of acquisition of problem solving skills. Pre-service teachers from State Universities showed higher acquisition of 21st century skills compared with Private Sectarian and Private Non-sectarian teachers. Considering the region, there was a very significant difference between region and the pre-service teachers' extent of acquisition of the 21st century skills. Pre-service teachers from Region 4a demonstrated most of the 21st century skills compared with other regions. Additionally, respondents from Region 2 and 3 had a higher acquisition of communicative and collaborative skills respectively.

Index Terms: Adaptability, Critical thinking, Flexibility, Private Sectarian, Private Non-Sectarian

1. INTRODUCTION

The teachers demanded by the K to 12 curriculums are those who are equipped with these 21st century skills. The education graduates must possess the 21st century skills themselves so they can in turn develop them in their students. Future teachers will be handling digital natives and digital learners, who are capable of multi-tasking and who look for evidence and deliver outcomes. All of these factors demand change in the teacher-training program to better equip teachers with the necessary 21st century skills. This necessitates effective learning activities and instructional materials geared towards the development of specified competencies [1]. One of these is the utilization of instructional modules using Outcomes-based approach to assess the demonstration and acquisition of knowledge, skills and attitudes essential to the effective performance of real world tasks. The OBE approach entails several instructional methods and strategies that allow students to demonstrate the skills and knowledge they have learned, and require more assessment activities to ensure the achievement of the outcomes. Considering all the aforementioned information, it can be stated that the study of pre-service 21st century skills and the development of instructional modules to enhance these skills might help bridge the gap in preparing pre-service teachers to meet the needs of their 21st century learners. This is the reason why the researcher was able to come up with the study in which the Self Assessments and the 21st Century Skills of Pre-Service

Teachers of selected regions in the Philippines was analyzed.

2 THEORETICAL FRAMEWORK

The theory of Thomas L. Friedman (2007) on globalization was the basis of the theoretical framework of this study. His review of current globalization shifts suggests the need to integrate 21st century skills in education. Friedman's perceptions offer the first sign that American education does not sufficiently address the 21st century skills demanded for life in a changing global economy. In his book, *The World is Flat*, Friedman offers a clear picture of the shifting global economy. He explains specifically the development of job market and nationwide economies that resulted from ten flattening forces that happened since the early 1990's. These forces have contributed to the present global economy and demand a new set of skills to thrive in this economy. In order to prepare a new generation for a future economy, these globalization skills must be addressed by society as a new emphasis in education [2].

Friedman describes the development of globalization as having emerged during three important eras: globalization 1.0, 2.0, and 3.0. The development of these eras can be described as the global society progressing from one that worked in isolation, to one that works collaboratively. This has been made possible by the merging of personal computer and fiber optic cable (Friedman, 2007). It is in this sense that communication has grown rapidly and will continue to do so as technology becomes advanced. Currently, globalization provides an individual the chance to communicate and collaborate regardless of distance and location. The comfort of communication and sharing of information challenges an individual to compete for jobs internationally. In this era, workers will need to acquire skills that will allow them to be

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Validity And Reliability Of The MSLQ Malay Version In Measuring The Level Of Motivation And Self-Regulated Learning.

Fakhruddin Khosim, Mohd Isha Awang

Abstract: Motivated Strategies for Learning Questionnaire [1] is a survey instrument that measures the dimensions of motivation and self-regulated learning. This research is conducted to determine the validity and reliability of the MSLQ-Bahasa Melayu version. The study sample consists of 395 Form Two Orang Asli students in the state of Perak, Malaysia. The statistics used is the Cronbach's Alpha reliability analysis and the results of factor analysis are to confirm the factors that exist in the survey. The study findings for Cronbach's Alpha reliability for all constructs are almost the same with that reported in the original version. Meanwhile, for the factor analysis, three factors were successfully extracted into the motivation dimension, while for the self-regulated learning dimension, only one factor was successfully extracted as compared to two factors in the original version. In conclusion, MSLQ-BM is an instrument that has high validity and reliability in measuring motivation and self-regulated learning in the context of school children in Malaysia.

Index Terms: reliability, validity, factor analysis, MSLQ, Orang Asli

1. INTRODUCTION

There are many quantitative studies all over the world that use survey instruments which have been translated, especially in the field of social sciences generally and the field of education specifically. The said instrument has been adapted and translated into the native language based on the needs and objectives of the study. However, the use of an instrument which has been adapted and undergone the process of translation does not guarantee that it can measure the same construct as the original due to the factor of difference in language. Based on [2], apart from the factor of bias, there is another important issue in the translation and adaptation of instrument, which is validity. He firmly asserted that validity and reliability must be reviewed and rechecked after an instrument has been adapted and translated into a new language. Motivated Strategies for Learning Questionnaire (MSLQ) is a self-reporting survey instrument that is specifically constructed to measure the motivation and learning strategies of college students [3]. This instrument is also refined through undergoing many changes and improvements until demonstrates a satisfactory level of validity and reliability when administered to college students in the United States of America [4], [5]. This study utilises a preliminary MSLQ instrument for secondary school students, where there are less number of items and the statements are shorter and easier to understand, compared to the version for college students. MSLQ can measure the dimensions of motivation and learning strategies from a socio-cognitive learning perspective, where students are a source of active information processing.

This is explained by [6] which stated that motivation and learning strategies are not a triad but instead they are dynamic characteristics that can be controlled by the students. The MSLQ instrument contains 44 question items which are divided into two dimensions, namely motivation and self-regulated learning. The motivation dimension is divided into three constructs, namely self-efficacy, intrinsic values, and test anxiety. Self-regulated learning consists of two constructs, which are cognitive strategy used and self-regulation. This instrument can be used entirely or partially according to the needs of the study [5]. [7] in his review stated that the MSLQ instrument has also been used in many learning situations such as long-distance learning (online classes) and street learning station. Many studies have been carried out to investigate this instrument's psychometric characteristics which have been translated into various languages such as Iranian, Turkish, Thai, Mexican, Oman, Chinese language and others. However, there are very few studies which involve the exploration of MSLQ psychometric characteristics in Malaysia, especially those involving Orang Asli students. Therefore, the objective of this research is to determine the validity and the reliability of the MSLQ Bahasa Melayu version (MSLQ-BM).

2 LITERATURE REVIEW

A study conducted by [8] using MSLQ Chinese version administered to 477 respondents who were school children aged between 12 to 19 years, have been translated into Chinese language using the back translation method through confirmatory factor analysis (CFA). The study found that the motivation component can be successfully extracted into three factors, namely self-efficacy, intrinsic value, and test anxiety. However, the self-regulated learning component is extracted to one factor only compared to two in the original version. This demonstrates the possibility that the items in both factors are in fact measuring the same thing. Ref. [9] in a research carried out upon a sample of 597 university students to analyse the psychometric characteristics of the Spanish version of MSLQ instrument found that all factors are extracted according to the original version, except for one intrinsic factor that had to be eliminated based on the exploratory factor analysis (EFA). The research findings also showed that the instrument's reliability index was at a high level ($\alpha=0.70$). Another research

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