# Table of contents

**Volume 180**  
**2017**

- Previous issue  
- Next issue

## 1st Annual Applied Science and Engineering Conference (AASEC), in conjunction with The International Conference on Sport Science, Health, and Physical Education (ICSSHPE)  
16–18 November 2016, Bandung, Indonesia

### Papers

<table>
<thead>
<tr>
<th>Title</th>
<th>DOI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerobic Exercise and Its Effect on Oxytocin Level and Labor Progression</td>
<td>012177</td>
</tr>
<tr>
<td>First Grade Primary School Students' Physical Activity Level on Physical Education Subject through Live Life Well at School Program</td>
<td>012178</td>
</tr>
<tr>
<td>Development of &quot;Tani Pencak Silat Nusantara&quot; For Developing and Conserving Pencak Silat as a Nation Cultural Asset towards Globalization</td>
<td>012179</td>
</tr>
<tr>
<td>Volleyball Coaching Philosophy Profile</td>
<td>012180</td>
</tr>
</tbody>
</table>

- View abstract  
- View article  
- PDF
PAPER · OPEN ACCESS

Development of “Tari Pencak Silat Nusantara” For Developing and Conserving Pencak Silat as a Nation Cultural Asset towards Globalization

To cite this article: Siswantoyo and Kuswarsantyo 2017 IOP Conf. Ser.: Mater. Sci. Eng. 180 012179

View the article online for updates and enhancements.
Development of “Tari Pencak Silat Nusantara” For Developing and Conserving Pencak Silat as a Nation Cultural Asset towards Globalization

Siswanto yo¹, Kuswarsantyo²

¹Faculty of Sport Science, State University of Yogyakarta, Indonesia
²Faculty of Language and Art, State University of Yogyakarta, Indonesia

*siswanto yo@uny.ac.id

Abstract. Pencak silat is the culture of the archipelago which has values of ethical, aesthetic, athletic, sportsmanship, and has 4 aspects: sports, martial arts, mental and spiritual. Pencak silat movements are very closely with dance movements, yet up to now there is no dance with nuance of pencak silat Indonesia, hence, it needs to be developed. The research aimed to create a pencak silat nusantara dance called PSN dance. The research was carried out through research and development approaches with the design of Borg and Gall. The research was conducted in the second year of 3 years. The results show that a series of PSN dance combining dance and pencak silat motions nusantara typical has been created, beginning from Sumatera, West Java, Yogyakarta, Kalimantan, Bali and Papua. Various choreography innovations have been done to the PSN dance to perform a better show. During the performance, the dance was accompanied by new creation of traditional music. PSN dance was performed by 12 male and female dancers. The research results have been validated by experts of dance and pencak silat showing the proper results. The research can be concluded that the PSN dance has nusantara culture value, with the performance of innovative choreography, accompanied by traditional music, and can be performed in a variety of cultural and sports events.

1. Introduction

Pencak silat is one of cultural heritage, which has ethical, aesthetic, athletic and sportsmanship values. Besides, the pencak silat also has four aspects, namely the mental spiritual, martial arts, art and sport aspects [1]. In the perspective of art, beautiful movements of pencak silat can be performed, which have an affinity with elements of dance movements. Recently there is much pencak silat training development, but there is still rarely development of the combination between motions of pencak silat and dance that is packaged through a structured research study. Therefore, the development of pencak silat dance is much needed.

The research aimed to develop “TARI PENCAK SILAT NUSANTARA” in an effort to support the government in developing culture through Sport and Tourism Culture towards development of culture tourism and Sport Industry. It promotes the local genius towards Globalization through culture and sport. Many similarities between dance and pencak silat, they are: fundamental aspects are “WIRAGA – WIRAMA – WIRASA”. The tree aspects are underlying a person to learn both pencak silat and dance.
Where the dance has several advantages, such as: the combination of dance and martial art of pencak silat, containing philosophical and cultural philosophy, containing plot developments in the art of pencak silat, and serving as local cultural expression which can be performed in various national and international events. This product would be very awaited by market within the framework of the promotion of art and culture, because pencak silat dance has not yet been found.

To understand how beautiful the pencak silat dance product, in a simple technical doing pencak silat dance consists of elements of arm motions, steps, footwork, body bend and physical ability element is required in the form of balance, flexibility, endurance of limb muscles and others that are done in a certain duration. Technically the way of implementation with the equipment needed in pencak silat dance is likely that there is a difference to the already existing dance; hence problems on pencak silat dance have been completed with the creative and innovative dance form.

Dance is an expression which pored over rhythmic motions, where the motions can be defined into two kinds, namely meaningful and symbolic gestures. Dance is closer to the symbolic expression, because with motions, symbol can convey many meanings. There are expression formers i.e. motion, rhythm and dynamics [2]. The art of pencak silat is a motion consisting of various techniques; they are positions, step patterns, attack, avoidance, and other techniques, which can be done individually, in pairs or in groups for performances to many people [1]. The archipelago is the limitation of the territory of Indonesia which has a rich diversity of martial arts or the pencak Silat School that is developed. Pencak Silat Nusantara dance is designed by combining science of dance and pencak silat.

Pencak silat in principle has four aspects which include the mental spiritual, cultural art, martial arts, and sports [1]. Seen from the understanding of art and culture it has meaning that pencak silat is the result of human creation that can be used to defense and may also be performed to public through the festival of pencak silat arts. In the process of learning and practice of pencak silat the stages to create a series or individual motion that resembles a dance and express motion/wiraga, according to the rhythm/wirama and internalize with great soul/wirasa are found [3]. While in dance, terms of wiraga, wirasa and wirama are also known. Regarding this matter, various similarities in dance and pencak silat art could be examined. Thus, research on Tari Pencak Silat Nusantara is very necessary to be realized to improve wealth of the culture, dance and can be utilized in various events for the performance and development of tourism sport. Consideration of the choreographer and creator is the up-to-date, creation and creativity, opportunity and challenge of preserving and developing pencak silat and dance as the nation cultural asset.

Dance is an expression which pored over rhythmic motion [4], the motion is defined in two kinds of motion i.e. meaningful and symbolic. Dance closer to the symbolic expression, because with motions, symbol can convey many meanings. There are expression formers i.e. motion, rhythm and dynamics and the soul expression. Therefore dance mastery should pay attention to aspects of WIRAGA, WIROMA, and WIRASA that become the basis of people learning dance. Yogyakarta style dance based on the Palace of Yogyakarta refers to the philosophy of Joged Mataram containing SAWIJI – GREGET – SENGGUH – ORA MINGKUH. Joged mataraman philosophy is not only used in Yogyakarta dance style, but can be applied to any performance, including MARTIAL ART OF PENCAK SILAT.

Sawiji is the concentration realized by worship motion, Greget is dynamics, Sengguh is confident but not to be arrogant, Ora mingkuh means never give up. Joged mataraman philosophy is expressed by Pangeran Suryobronto [4]. Related to wiraga, the solemnity of a dancer or pencak silat practitioner has to be total, hence it will bring up the greget within him.

Along with the dance development in education to the 21st century, it has undergone several times of evolution. Results of the study conducted by [5] are described as follows. Despite tertiary institutions acknowledging that reflective practice is an essential component of undergraduate dance teacher training, there is often a disparity between the tertiary students’ reflective skills and the more sophisticated reflective ability needed to navigate the twenty-first-century workforce. This reflective pedagogy based on exploration, collaboration, critical questioning and connections with community forms the basis of a model of tertiary dance teacher training; the Performance in Context Model (PCM). The PCM represents a holistic collaborative approach to dance teacher education: the marrying of
‘teacher-as-artist’, ‘teacher-as-performer’ and ‘teacher-as-researcher’. More specifically, it emphasizes the need for mature, reflective, receptive and flexible approaches in response to dance teaching and learning. These are enacted in a variety of contexts, with tertiary dance teaching students identifying as teaching artists, as well as researchers of their own practice. To obtain an innovative work of pencak silat dance, it required in-depth study to combine motions, values, and philosophy between dance and pencak silat.

2. Research Methods
This is a development and research. The research design was used with the approach [6]. Research and development method is a method used to produce a particular product, and test the effectiveness of the product [7]. The resulting product is in the form of tare pencak silat nusantara (Tari PSN). [6] States that basically research and development procedure consists of two main objectives, namely: (1) developing the product, and (2) testing the effectiveness of the product in achieving goals. The first goal is called the development function, while the second objective refers to validation. Design and implementation of this research was carried out in the dance laboratory of Faculty of Language and Art and the Sports laboratory of Faculty of Sport Science of UNY. This research involved experts in dance and pencak silat.

Instruments for collecting data used the questionnaire in the form of written statements for respondents to answer [7]. The validity used in this study was construct validity where material and media experts have stated that the content of the PSN dance met the eligibility, hence, it is declared valid. Further, result from product trial was made in percentage. It is said to be proper when the result show the percentage above 75%.

3. Research Results and Discussions
To create a creative PSN dance, it required several stages: identification of tradition dance and pencak silat movement specificity, limited discussion with experts in dance and pencak silat, the preparation of a series of gestures, assessment and revision until those results are stated to be proper. In the preparation of PSN dance, it was also based on several supporting references so that the results in the learning process can be easily learned and done by others; hence, it becomes more effective and efficient. It is in accordance with the statement of [8] that Effective teaching of dance skills is informed by a variety of theoretical frameworks and individual teaching and learning styles. The predominant thinking and primary research findings from dance pedagogy, education, physical education and sport pedagogy, and psychology are distilled into 16 guidelines for teaching dance. Subsequently, theoretically and empirically informed strategies for best teaching practices are explored by reference to three broad categories: 1. clarifying the process and goals of the class, 2. discussing various influences that affect the dancer’s progress, and 3. clearly defining the class structure and content.

To simplify the learning process, then the material of the PSN dance development consisted of dance movements and technical movements of pencak silat that illustrated the specificity of the region. PENCAK SILAT NUSANTARA Dance is composed of elements of the archipelago culture that begins from Sumatra, West Java, Yogyakarta, Kalimantan, Bali and Papua. Identification study results between dance and pencak silat is reviewed from the side of the motion, there is a similarity in motion elements, they are: the horse stance, starting position or arm motion, footwork motion, footwork pattern, hand motion, foot motion and appreciation. Some similarities were then explored and combined based on the characteristics of dance and pencak silat movement.

In addition, some in-depth studies of the Pencak Silat Nusantara Dance of its specificity aspects are found, they are: 1). in Northern Sumatra there are dance movements relatively accentuate many coordination movements, 2) in West Sumatra pencak motions tend to use more of the position of the low horse stance and sempok, long hands crossed, turning motion as its characteristic, 3) in West Java the dance tends to use coordinative movements, middle and bottom horse stance, short hands crossed and the close distance, 4). drum rhythms tend to be more dominant, and the characteristics of jaipong motions which are typical, 5). in Yogyakarta, the music tends to give the dimensions of sacred, dynamic
motions and rhythms, 6). In East Java one more clear motion is found, and it is in full power motions, 7). Bali accentuates the rhythm of Balinese music and dynamic and repeated motions, eyes expression, 8). In Borneo it accentuates specific motion by using the shield and mandau, motion for female dancers are relatively quiet with repeated motion, while male dancers are more agile and attractive, 9). In Papua, it uses the spear and bow as the specificity of the region, the motion is more energetic.

Dancing needs support of good physical abilities. The physical abilities are the strength, endurance, balance, flexibility and others. For the preparation of the PSN dance in order not to cause injury and the emergence of health problems, then in the preparation also pay attention to the supporting science such as Anatomy, Physiology, Kinesiology and mechanics, physical condition and body fitness. [9] Developmental dance movement can provide opportunity for physical/cognitive advancement for young children. Investigating learning through developmental dance movement as a kinesthetic tool in the Early Years Foundation Stage. This is in line with the statements of [10] that her research results state the impact of bringing rest and imagery into her dance classroom (techniques drawn from somatic practice), the teaching fellow learned how to teach anatomical awareness to her high school students and to help them apply anatomy concepts to their ballet technique. Through this process, she also learned the importance of maintaining an inquiry stance on her teaching practice.

The above statement is emphasized by [9] that the understanding of the significance of movement to learning benefits from advances in neuroscience. This study considered a neurophysiological perspective in relation to the educational theory of Accelerated Learning (AL) for which little empirical evidence exists. Childhood development themes and learning strategies from a neurophysiological-psychological viewpoint were investigated through the use of developmental dance movement (DDM) as a kinesthetic tool over an eight-session program with three early years’ practitioners and two reception classes in two UK primary schools. The ease in the process of learning PSN dance will support the potential to be developed by promoting local genius of dance and motion of pencak of the typical areas. In PSN dance, music accompaniment that has the very prominent nuance and rhythm of the origin is produced. This is intended to be able to know various traditions of music in the new creation. Advance research studies will be done for more detail of meanings, functions and other uses of this music compilation. In addition to music, the development of innovative choreography was also produced, making it express the dynamics of PSN dance.

In dance development, choreography aspect becomes more important to identify creativity and facilitate it in learning process. It is in accordance with the results of the study of [11], Choreographic knowledge that enhances the technical and creative aspects of choreography is examined and interpreted on the basis of Aristotle’s teche and phronesis. The research tracks 10 professional choreographers, of whom 5 were selected from Korea and the remaining 5 from the United States, using qualitative research methods through the phenomenological approach. Choreographic knowledge identified through the components of choreographic teche and phronesis is clarified in three dimensions: choreography in form, choreography in context and choreography as metaphor. The study culminates with suggestions for further research and for practical implementation.

Furthermore, from the side of the teachers it also has the perception in evaluating and principles of art are integrated into the key to improve the dance learning outcomes. Further, how the students’ perception toward dance learning revealed by [12], recent experiences in rehearsals have led us to question how student dancers perceive the culture of rehearsal. The current knowledge of the field, by analyzing the learning opportunities in a rehearsal culture and the intersection of student perceptions and experience. Further, [12] explains, As a result, many states are reforming procedures in response to educational reforms. The change to evaluate teachers in a systematic way has understandably led to widespread implementation concerns, equity issues, policy and procedure questions, and teacher anxiety. Teacher anxiety may be especially magnified for the dance educator who often faces perceptions that dance is an extracurricular nicety. Current trends in teacher evaluation reform may further marginalize dance by evaluating student test scores and implementing evaluations by administrators with little dance content knowledge. Principal feedback is a crucial component of teacher evaluation, yet inadequate knowledge of dance may lead to insufficient teacher evaluations and
instructional progress. By strategically exposing principals to the art of dance through arts integration, teachers may be successful in improving perceptions and knowledge of dance that could ultimately result in higher quality of teaching and learning. In dance learning, male and female students’ motivation [13] the results show important gender differences in the students motivation towards participation in the dance in the physical education context when different teaching techniques were used. This suggests that teachers may need to apply a different treatment depend on gender.

The results of the PSN dance compilation has fulfilled the learning concept from the easier to the more complex from a collaboration of dance and pencak silat. Attractive, innovative choreography and musical accompaniment which show the specificity of the region become one of the distinctive features of the PSN dance. It is expected that the PSN dance can be an alternative of interests and talents development, or self-development in schools nationwide.

4. Conclusions
Based on the results of the study, it is concluded that a series of PSN dance movements with the nuance of dance and pencak with regional typical, covering the areas of Sumatra, West Java, Yogyakarta, Kalimantan, Bali and Papua has been arranged. It is supported by interesting choreography innovation, equipped with the development results of the characteristic traditional music with each own area specificities. PSN dance can be taught easily at school for alternative of interests and talents development, or self-development in schools nationwide.

5. Acknowledgement
We would like to express our gratitude to the Ministry of Research, Technology and Higher Education of the Republic of Indonesia and the State University of Yogyakarta, which have been providing research support and have resulted in the creation of Pencak Silat Nusantara dance, and all parties who have helped the program completion.

References
