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## D'Selonjor 515, innovation jawanese yoga to release stress muscle and healthy

**Jaka Sunardi, Siswantoyo and Rajesh Kumar**

### Abstract

Quality and work productivity are influenced by the level of fitness and skills. The ability to work in various sectors of work during long duration will cause muscle fatigue in several parts of the body. There has not found yet a model which is integrated between relaxations, stretching, breathing exercises that can reduce stress muscle. This study aims to develop a relaxation model by combining relaxation exercises, stretching, and breathing exercises with local genius values. Development research method used with Borg and Gallapproach. The results of the study obtained an integrated relaxation model named D'Selonjor Jawanese Yoga, consisting with five core movements doing sitting position. The model was declared feasible to be applied as a relaxation model which is useful for reducing muscle stress, providing freshness of the body, improving blood circulation, and improving fitness. Qualitative results stated that movements are easy to do, carried out while sitting, and 30-60 minutes after exercise the body feels refreshed, relaxed. It was concluded that the D'Sonjonjor Jawanese Yoga exercise model was simple, effective in releasing stress muscles, giving a fresh feeling, relaxing, and being an alternative relaxation model that was done by sitting.

**Keywords:** D'Selonjor, jawanese, relaxation, sitting, fresh, simple, style

### Introduction

The prolonged taking posture during work affects the risk of developing musculoskeletal disorders or fatigue of the lower and upper limbs, especially in lack of relaxing muscles. While different ergonomic tools are available to assess and manage the postural risk of the back and the upper limbs Capodaglio, E. M. (2017) <sup>[1]</sup>. Work related musculoskeletal disorders (MSDs), poor body postures, and low back injuries are the most common problems occurring in many industries including small-medium industries R. Ogasawara, J. Loenneke, R. Thiebaud and T. Abe (2013).

There is the assumption that, generally, in the workplace, employees who are more satisfied with the physical environment are more likely to produce better work outcomes. Chandrasekar (2011), stated that workplace environment in a majority of the industries is described as unsafe and unhealthy for the fact that there are poorly designed workstations, unsuitable furniture, lack of ventilation, inappropriate lighting, excessive noise, insufficient safety measures in fire emergencies and lack of personal protective equipment. User satisfaction is recognized as an important factor in the success of an organization and is regarded as a key indicator of performance Dole and Schroeder (2001) <sup>[4]</sup>. Lee and Brand (2005) <sup>[5]</sup> reported that studies reveal that workers who are comfortable with their working environment have the tendency of generating better work. This is because their physical environment positively affects their job perception, attitudes, and job satisfaction. Syaukani, A., & Yan, L. (2019) <sup>[3]</sup> found that improper mechanics of sport jump shot caused the muscle fatigue.

Prolonged duration taken in the workplace, according to Lafond *et al.* (2009) <sup>[6]</sup> has been linked to an onset of work-related musculoskeletal fatigue and, in particular, with lower back pain and upper limbs pain or fatigue. Ansari *et al.* (2013) reported on the study and justification of body postures of workers working in SSI in India, found evidence of musculoskeletal disorders among the workers as a result of prolonged same postures.

The life of human is built with many various assignments, but the most of them return back and cause uncomfortable wellbeing in the hand of physical and mental health.

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The ability to work in various sectors of work during long time causes high fatigue in several parts of human body such as: high fatigue of back muscles, trapezius, hamstring muscles, quadriceps muscles, gastrocnemius, soleus, and other muscles. In general the prevalence of high fatigue from the work is already increased, in fact this problem will decrease the productivity from many fields like (1) Economic, (2) Educational, (3) Health, (4) Social (5) Psychological and others, Based on the results of the research above, there has not been found a model that is integrated between relaxations, stretching, breathing exercises that can reduce stress muscle, and provide freshness of the body.

This study aims to develop a relaxation model by combining relaxation exercises, stretching, breathing exercises with local genius values, and then we should reduce the muscle fatigue and increasing the freshness of the body

The necessity of the research is to develop an effective model to release muscle stress and increase wellbeing healthy, so from this study benefits are such as: (1) To cut off the muscle fatigue occurring during the endure work, (2) Improving

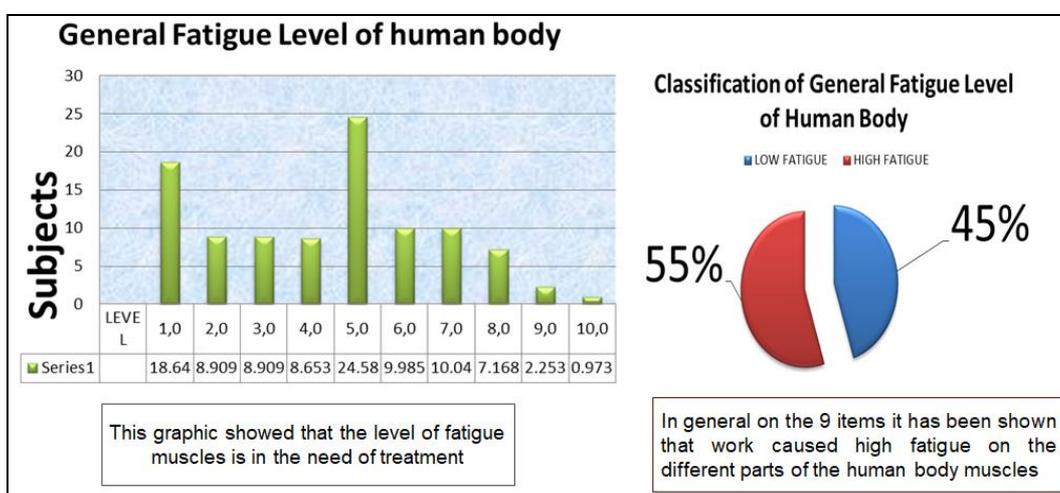
physical and mental wellbeing (3) Allowing human body continuous activity, (4) Increasing of the productivity in many various sectors (Education, office, Government, private service etc.)

**Material and Method**

This study is development research (R&D), with Borg and Gall approach method. The sample of this study is a mixed subject from in Asian, African and American continents, data collected technique with questionnaire observation and playground, data analyse descriptive statistic with SPSS. The model was declared feasible to be applied as a relaxation model that is useful for reducing muscle stress and providing freshness of the body but also improving blood circulation. In the following below we analyse case by case of the subjects

**Treatment D’selonjor model relaxation Jawanese Yoga**

Characters of subjects according to the general fatigue level of human body



**Fig 1:** General Fatigue level of human body

For this figure we analyse 9 items corresponding to the fatigue located to the different parts of human such as fatigue of: (1) eye muscle, (2) neck muscle, (3) shoulder muscle, (4) low back muscle, (5) waist muscle, (6) Hips muscle, (7)

Quadriceps muscle, (8) Hamstring muscle, and (9) gastrocnemius muscle. The result from surveyed sample showed that

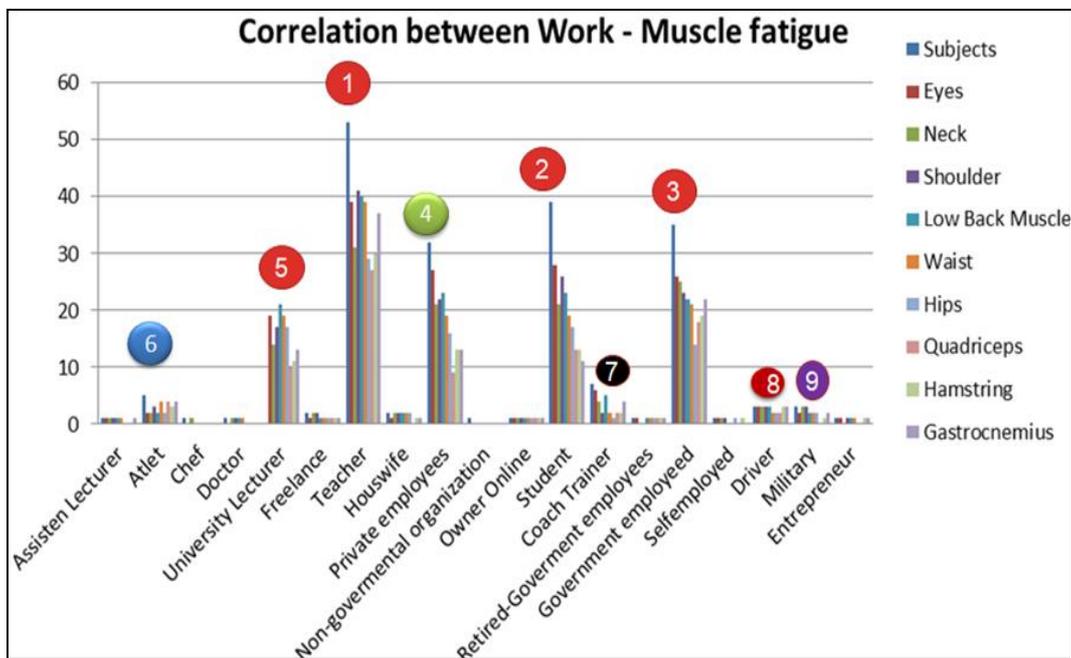
**Table 1:** Fatigue located to the different parts of human

Subjects in % from 217	Level	Decision
18,64%	1	Low fatigue
8,909%	2	Low fatigue
8,909	3	Low fatigue
8,653	4	Low fatigue
24,58	5	High fatigue
9,985	6	High fatigue
10,04	7	High fatigue
7,168	8	High fatigue
2, 253	9	High fatigue
0,973	10	High fatigue

From the classification above about the severity of fatigue carried out by different sectors work and kinds of sports activities, it can be seen that most of the workers were suffering from the high fatigue. The high indicator tasted the need of a new model to relax muscle in order to allow the

continuous of activities but also to improve the physical and mental wellbeing.

Nevertheless, the following figure below will make up the effect from the different work and several of kinds sports activities to the different parts of the human body.



**Fig 2:** Correlation between Works – Muscle fatigue

According to the different muscles of the human body during the work, the study showed that many assignments which help human to survive always caused muscles fatigue, nevertheless

from the survey conducted showed that the severity of fatigue to the muscles is classified according to the nature of the work:

**Table 2:** The severity of fatigue to the muscles is classified according to the nature of the work

	Nature of the Work	Effect from the work to the human body
1	Professional of Teaching	Teaching professional is the most cause of the muscle fatigue carried out by the average of working hour or prolonged duration
2	Educational	According to the long time and posture taken during learning it is found that Education is on the second rang of the muscle fatigue cause.
3	Government service	Third rang is government service, the inadequate service environment and the long time for working are the basic of the general muscle fatigue.
4	Private employees	Inadequate environment service and long duration of working caused general muscle fatigue.
5	University service like: Teaching	The combined posture taken by the University Lecturers during their professional affects the muscle fatigue.
6	Various kinds of sports activities (Athletes and Coach Trainer)	The excessive usefully muscle during sport often caused the muscle fatigue
7	Drivers	Prolonged sitting posture taken during driving always caused muscle fatigue
8	Military and Polis	Prolonged standing posture taken by soldiers and polis caused the several muscle fatigue

**Result and Discussion**

The results of the study obtained an integrated relaxation model with the name D'Selonjor Jawanese Yoga, consisting of five core movements, how to do with a sitting position. The model is declared feasible to be applied as a relaxation model that is useful for reducing muscle stress, providing freshness of the body, improving blood circulation, and improving fitness. Qualitative results state that movements are easy to do, carried out while sitting, and 30-60 minutes after exercise the body feels refreshed, relaxed. It was concluded that the D'Sonjonjor Jawanese Yoga exercise model was simple, effective in releasing stress muscles, giving a fresh feeling, relaxing, and being an alternative relaxation model that was done by sitting.

**Discussion**

The high levels of fatigue in the lower and upper limbs expressed by the workers indicated how work is very severe on the human muscle. Erwin S. K., Hari. S, E. (2019), in their study done showed that to know the level fatigue it is necessary because the high fatigue does not allow the continuous of movement. It seemed logical that maintaining a

standing, a sitting or combined posture without the relief of relaxing affect or make a discomfort muscle. In fact, individual interview data revealed that some subjects (55%) already suffered from general high fatigue of lower and upper limbs usually wore compression stockings during the workday. In other side (45%) subjects were suffered from low fatigue, the level of fatigue showed by the study indicated the strong need of a new model of relaxation named D' slonjor Jawanese relaxation. It seemed plausible that other subjects suffered from similar health problems without, however, expressly declaring them. Santosa, Budi & Sulisworo, Dwi. (2018) [2], said that the original construction of the work-based assessment is based on an integration of a new model to allow every field to improve the productivity.

The results of the study obtained an integrated relaxation model with the name D'Selonjor Jawanese Yoga, consisting of five core movements, how to do with a sitting position. The model is declared feasible to be applied as a relaxation model that is useful for reducing muscle stress, providing freshness of the body, improving blood circulation, and improving fitness. Qualitative results state that movements are easy to do, carried out while sitting, and 30-60 minutes after exercise

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In the study conducted by Wesly H. (2015) <sup>[9]</sup> showed that the good environment is one factor of receiving good productivity in every field.

### Conclusion

Further research is needed to understand the health impact of prolonged standing at work and to reach consensus on recommended working hours, rest allowances and alternating tasks. Further studies are required to investigate and compare the risk of lower limb disorders in other categories of workers. A collaboration among ergonomists, designers, occupational physicians, work technicians and different stakeholders is needed to improve the well-being and working environment of women working in the retail sector. D'selonjor model relaxation Jawanese Yoga is the most solution to take off the problems related on musculoskeletal carried out by different work and kinds of sports activities.

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