

D'selonjor 515 Relaxation to Treat Muscle Disorder and Health: Case in Several Countries

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Abstract: In different countries, it was founded that the quality and productivity of the work are drained by good physical condition and skills. The prolonged work in different work areas certainly causes muscle pain in different parts of the body. There was not yet found a model integrating relaxation, stretching, breathing exercises to reduce muscle stress. This study aims to develop a relaxation model by combining relaxation exercises, stretching and breathing exercises with local engineering values. Research method for development used was the one proposed by Borg and Gall. The results of the study resulted an integrated relaxation model called D'selonjor 515 Relaxation consisting of five basic movements in a sitting position. The model has been declared usable as a relaxation model, which is useful for reducing muscle stress, providing refreshing feeling to the body, improving blood circulation and improving fitness. The qualitative results showed that the movements were easy to perform, performed in a sitting position during 30 up to 60 minutes, the body feels refreshed and relaxed after it. It was concluded that the D'Sonjonjor Javanese Yoga exercise model was simple, effective in relaxing stressed muscles, giving a wellbeing and freshness, relaxing and constituting an alternative relaxation model performed in a sitting position.

1 INTRODUCTION

Taking a posture for a long time during any work or activity is an important factor for musculoskeletal disorders or pains of different parts of the body. In particular, the lack of muscle relaxation is the main cause of these defects in the human framework. The ergonomic sciences have tried to correct the tools used by the citizens during the various bolts, but there still a deeply lacking of discomfort Capodaglio, E.M. (2017).

It is assumed that, generally, in the workplace, employees who are more satisfied with the physical environment are more likely to produce better results Chandrasekhar (2011). The inadequate working environment in the majority of companies is lacking in the health of employees due to the lack of appropriate equipment, besides inadequate furniture, lack of sports support, etc. Lee and Brand (2005) in their study reported that workers who are comfortable with their work environment have a strong interest in providing a good return. Syaukani, A., and Yan, L. (2019) demonstrated in their study

that poor sports application is a major source of musculoskeletal disorders.

A study conducted by Lafond et al. (2009), brought to light the results that showed that prolonged working time accompanied by monotony or inadequate posture causes musculoskeletal pain. Human life is built by many different bolts, but most of them cause physical and mental discomfort. The ability to work in a variety of work areas overtime generates a high muscle problem in many parts of the human body, such as: back muscle, trapezius, hamstring muscles, quadriceps muscles, gastronomy, soleus and others. In general, work-related trauma is already much more prevalent. In fact, challenges will reduce productivity in many areas such as (1) economic, (2) educational, (3) health, (4) social (5) psychological and psychological.

Based on the results of the research above, we cannot find any solution to the latter problem as an integrated model between relaxation, stretching, breathing exercises that can reduce muscle stress and bring freshness to the body. This study aims to develop a relaxation model by combining relaxation exercises, stretching exercises, breathing exercises

and local engineering values. We should then reduce muscle fatigue and increase the freshness of the body.

The need for research is to develop an effective model for releasing muscle stress and improving healthy well-being. This study therefore has the following advantages: (1) to reduce the increased muscular pains during the service, (2) to improve the physical and psychological performances, mental well-being (3) to allow a continuous activity of the human body, (4) to increase of productivity in many sectors (education, office, government, private service, etc.)

2 MATERIAL AND METHOD

This study is research and development (R&D), employing Borg and Gall approach method. The sample of this study is a mixed subject from Burundi 37,5%, India 41,7%, Indonesia 4,2%, Malaysian 4,2%, Rwanda 4,2% , Taiwan 4,2%, Republic of Congo 4,2%, and Tanzania 4,2%, data collected technique with questionnaire observation and playground, data analyse descriptive statistic with SPSS. D'Sonjonjor Javanese Yoga exercise 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.

Table 1: General Classification of the musculoskeletal disorder from the various works.

Muscles	Pain Muscle in %		Level of Muscle Pain in %	
	Pain muscle	No pain muscle	High Level Pain	Low Level Pain
Eyes	29,2	70,8	29,2	70,8
Neck	58,3	41,7	29,2	70,8
Shoulder	33,3	66,7	37,5	62,5
Back Muscle	54,2	45,8	29,2	70,8
Waist	33,3	66,7	41,7	58,3
Hips	29,2	70,8	33,3	66,7
Quadriceps	25	75	37,5	62,5
Hamstring	12,5	87,5	33,3	66,7
Gastrocne mius	12,5	87,5	25	75

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.

Based on the above result of the severity of pain in from different sectors work and types of sporting activities, it can be seen that most that a several number of workers were suffering from the trouble musculoskeletal disorders. The high indicator of pain has highlighted the need for a new model to relax the muscles in order to allow the continuation of activities but also to improve the physical and mental well-being.

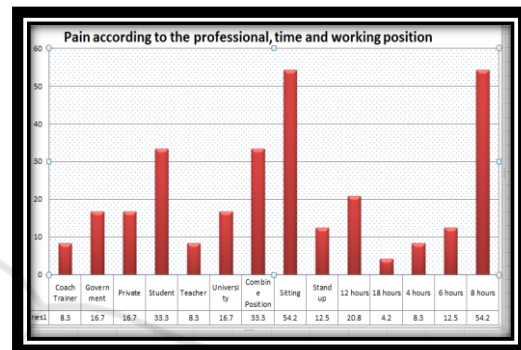


Figure 1: Prevalence of the pain according to the professional, time and working position.

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. From the subjects surveyed, learning (33,3%) was the first one which cause the traumatism of muscle, public service(16,7%) was on the second range, the next one was private work with 16,7 % from the subjects surveyed, the following was the teaching of university with 16,7% for causing the muscle pain, the last was sport branch (Coach trainer) with 8,3% to acute muscle pain.

Nevertheless, more than 50% from the subjects surveyed used the sitting position which carried out the pain of some muscle like the eyes muscles, neck muscle, shoulder muscles and back muscles. The combined position took a non-neglect place in causing the muscle pain so 33,3% from the sampling were suffering from that position taken during working.

Time factor was to show how longue many people endure on the tasks. The result concluded that 80% from the sampling worked more than 8 hours per day which confirm that the longue period take

during the service is one among the capital causes of the muscle disorders.

3 RESULT AND DISCUSSION

D'selonjor 515 Relaxation is a type of yoga with a training system using five core techniques to shape the body, reduce stress muscle and improve the wellbeing. The benefits from D'selonjor 515 Relaxation are to improve the work function of the endocrine (hormonal) glands in the body. It promotes blood circulation to all cells of the body and brain. Form more robust body posture, and muscles that are more flexible and strong, increase lung capacity while breathing, dispose of toxins from the body (detoxification), rejuvenate body cells and slow down aging, purifies the central nerve found on the spine, reduces body, mind and mental tension, and makes it stronger when faced with stress. It also provides an opportunity to feel deep relaxation. The results of the study was an integrated relaxation model with the name D'selonjor 515 Relaxation, consisting of five core movements. The core (composed of the oft-mentioned upper and lower abdominals as well as the side, back, psoas, and glutei muscles) provides a muscular framework that protects internal organs, aids movement, and lends balance and stability to the whole body in 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'selonjor 515 Relaxation 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. Moreover, it improves the endorphin hormone.

4 DISCUSSION

The presence of the musculoskeletal disorder in the lower and upper limbs expressed by the workers indicated how work is very dangerous on the human muscle. Erwin S. K., Hari. S, E. (2019), in their study, show that to know the nature of the disorder, it is necessary because the pain does not allow the continuous work. Hildebrandt, T., Shope, S.,

Varangis, E., Klein, D., Pfaff, D. W., & Yehuda, R. (2014) said that relaxing is needed to change stress muscle after exercise with long time and improving endorphin hormone. Nevertheless in the study of Moore, M. (1982), it is shown that during continuous exercise there is release of endorphin and the effect is called s runners high.

The results of the study is an integrated relaxation model with the name D'selonjor 515 Relaxation, 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.

5 CONCLUSION

Further research is needed to understand the health impact of prolonged sitting and combine posture at work and to reach consensus on recommended hours of work, rest allowances and alternative work. Further studies are needed to study and compare the risk of lower limb disorders in other classify workers. Collaboration between ergonomists, designers, occupational physicians, work technicians and different actors is needed to improve the well-being and working environment of women working in the retail sector. Japanese style yoga is the most effective solution for musculoskeletal problems caused by various types of sports work and sports activities.

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